Central Eurasia

Military Affairs

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CIS/RUSSIA ARMED FORCES

Moscow MD's Lt-Gen Zolotov on Training Year 93UM0246A Moscow KRASNAYA ZVEZDA in Russian 12 Dec 92 p 3

[Interview with MVO [Moscow Military District] Chief of Staff Lieutenant-General Leonid Sergeyevich Zolotov by KRASNAYA ZVEZDA Correspondent Aleksandr Oliynik, under the rubric: "Timely Interview": "The Training Year Has Been Completed. Problems Remain"]

[Text] The army and the navy are summing up the results of the training year that has just concluded. It was a difficult year for the Russian Armed Forces. Participation in the separation of the opposing sides in "hot spots", the massive diversion of personnel from combat training to gather the harvest and to plug up all sorts of holes in the country's collapsing economy, and the withdrawal of troops from nearby and far away foreign countries... Nevertheless, the military districts, groups of forces and fleets did not forget about combat training. And, as the results indicate, there were even certain successes in some places. Specifically, the Russian Federation Minister of Defense order lists Moscow Military District among the best based upon the results of performance evaluations.

MVO [Moscow Military District] Chief of Staff Lieutenant-General Leonid Zolotov discusses with our correspondent how the capital military district arrived at the training year's finish line, what problems the troops face and how they propose to resolve them.

[Zolotov] The fact that the training year coincided with the beginning of large-scale work on reforming the troops was the primary specific feature of the current training year. Personnel strength and military equipment are being reduced. The influx of units is increasing from nearby and far away foreign countries. The staff structure of division-sized and smaller units and the nature of their training (our military district has now become a border district) are changing in accordance with changes in the socio-political situation. Of course, all of that has left its mark on all of our work. Nevertheless, the end-of-training-period performance evaluation, which the commission under the leadership of the Ground Forces commander-in-chief conducted during the first stage, indicated good results. The majority of divisionsized and smaller units underwent performance evaluations. The Kantemirovka Guards Tank Division and units which Colonels Aleksandr Denisov and Aleksandr Simakin and Lieutenant Colonel Viktor Lapikov command achieved the best results based on commander, tactical and fire training. Military District PVO [Air Defense] units (incidentally, they received a high mark at the "Obcrona-92" [Defense-92] exercise), army aviation, and the engineer troops gave a pretty good account of themselves. But unfortunately they didn't manage to completely carry out all combat training tasks with good results. The combat training program was not completely carried out practically in all training subjects.

[Oliynik] Leonid Sergeyevich, couldn't you dwell in a bit more detail on the causes of that? As I recall, the military district did not "strengthen" the combat training program last year...

[Zolotov] The primary causes are the low manning levels of division-sized and smaller units (it reaches 50% in some subunits) and also the large diversion of personnel to activities not associated with troop training (this autumn more than 30,000 soldiers and officers were engaged in just gathering the harvest). And this year the dramatic shortage of material and monetary resources to support combat training also had an impact. As a result, we were compelled to significantly reduce the number of tactical exercises, especially with live fire training, driving exercises, etc. Right now the military district headquarters and the military council are engaged in a search for new ways to increase the skills of personnel and to strengthen discipline and good organization that respond to a greater degree to today's demands.

[Oliynik] And in what direction is this search moving?

[Zolotov] Analysis of the results of the training year attest to the fact that right now its sad to say that not only the quantity but the quality of exercises and training have been drastically reduced. Frequently they are conducted at an intolerably low organizational and methodological level. Commanders and headquarters are displaying little initiative in the search for original solutions and tactical methods and are poorly utilizing the capabilities of weaponry and combat equipment. In a word, professionalism is being lost before our very eyes. For example, the vehicle driving ratings of driver-mechanics and officers were reduced by 70% during the course of the performance evaluation. It has been reduced to the point that many servicemen cannot properly bring a combat vehicle to a halt at the designated location...

Under these conditions, we see the primary task in preserving the army's backbone—the officer corps. With an acute manpower shortage, its obvious that we must think about making some changes to the combat training program. It was calculated on 100% manning of subunits. I think we need to give unit and subunit commanders more rights—let them make the decision to fulfill combat training plans while proceeding based on subunit manning, the readiness of facilities, and the availability of budget resources, fuel and POL [Petroleum, Oil, and Lubricants] for these purposes.

[Oliynik] Nevertheless, we certainly need to somehow resolve the troop manning problem, especially at the battalion—company—platoon level? Incidentally, as you yourself have noted, the military district is being augmented by troops that are being withdrawn from abroad...

[Zolotov] Yes, it would seem that more than enough troops are arriving on military district territory. More

than 60 division-sized and smaller units and institutions have arrived during the first 11 months of this year alone. But a large part of them have already been disbanded. Now let's look further. We already have three times as many officers, especially senior officers, but we increasingly don't have enough soldiers and sergeants. And although the military district has large conscription and mobilization resources at its disposal, each time the next draft for military service is being transformed into a problem. Approximately 5,000 men did not appear at military commissariats to be sent to military service duty locations during this year's spring draft alone. Over 70% of that number are Moscow residents. Ways to improve the work associated with the draft were noted during a military council session with the participation of the heads of the administrative oblasts on whose territory the military district's troops are deployed. The heads of administration promised their comprehensive support. However, the fall draft is also proceeding with just as much difficulty.

[Oliynik] Maybe the situation will change as a result of the recruitment of volunteers that has begun? Can you already say something about how recruitment for military service on contract is proceeding?

[Zolotov] I think that this matter has sooner been calculated on the future. Judge for yourself. Right now, in accordance with the minister of defense order, we need to accept more than 10,000 men and more than 10,000 women into the military district for performance of military service on a contract basis. We assume that privates and sergeants, for example, in the Taman Division, will receive from 4,000-8,000 rubles depending on the specialty selected, the combat arm, time in service, etc., and under special service conditions, say, as part of peacekeeping forces—up to R20,000. The military council has examined that issue in detail. The divisionsized and smaller units where they plan to first of all transition to mixed manning have been determined. However, judging by the reports of division-sized and smaller unit commanders and from military commissars, for the time being few people desire to conclude contracts. A great deal of organizational work on a countrywide scale is still needed here. So, we can hardly anticipate a drastic change of the troop manning situation in the near future as a result of recruitment on contract.

[Oliynik] And this question, Leonid Sergeyevich. As you know, the formation of the organizational foundations of the new model of socio-humanitarian training was completed during this training year. In your opinion, what is the return from this training discipline?

[Zolotov] The inclusion of this discipline in the training process instead of political training has been positively perceived in the troops. But the spiritual potential set forth in it is still not being utilized in full force. I think that individual commanders and senior commanders, including their assistants for personnel, are still underestimating the significance of socio-humanitarian training in the education of people and therefore they are

poorly tying it in with the problems of increasing discipline and order and with the moral and psychological tempering of the soldiers.

In conclusion, I would like to stress that I intentionally focused attention on some of our problems and difficulties. On the whole, military district troops are dealing with their assigned tasks and the mood that reigns right now in our units and subunits gives us the basis to view the future with optimism.

Maj-Gen Bespalov on Autumn Draft

93UM0264A Moscow KRASNAYA ZVEZDA in Russian. 10 Dec 92 p 2

[Major-General Bespalov interviewed by Colonel Gennadiy Barnev: "Love Russia in Bad Weather Too"]

[Text] It has been two months since the start of the autumn draft. How is it going in Moscow?

On the eve of the meeting with the Military Commissar of the capital Major-General Vladimir Bespalov, I acquainted myself with the statistical materials. I must admit, they feel like a cold shower.

Judge for yourself: there were just three weeks before the end of the important campaign, and around 60 percent of the young men had been called up. Those for whom the time had come to enter the Army. Suitability for service based on health is less than 50 percent. As of 1 December, 3,700 men had failed to report to the draft commissions. Due to various deferments and other causes, only every tenth or eleventh draftee is entering military service. For the first time in many years there are draftees who do not have secondary or even incomplete secondary education.

Of course numbers are not absolute truth, but they do give more than enough food for thought.

[Barnev] Vladimir Aleksandrovich, you have two sons. One has already put in his service, the other is preparing for the Army. So I expect that the topic of military service and the callup of young men is probably one with which you are familiar not only as an official.

[Bespalov] Of course. It is close to everyone for whom the fate of the Army and of Russian are not just empty words. And we cannot help but be alarmed by the current situation. I assume that KRASNAYA ZVEZDA knows as well as I the manpower shortage which now exists in the Army and Navy. For example, some subunits of tactical formations and units of the Moscow Military District are at 40-60 percent manning levels. I know that in some other military districts, especially eastern ones, the situation is even worse. Officers and warrant officers are forced to pull guard duty on military installations in order to relieve the extreme loads on extended service personnel. It is hard to speak of any scheduled combat training under such conditions.

[Barnev] But this is very surprising. Haven't we maintained a multi-million army for a long time, and didn't our draft resources seem unlimited?

[Bespalov] This is a widesprend misconception. Before we had a uniform union Army. It was manned by the resources of all the republics. The Russian Army is significantly smaller, but it is also manned only by Russians. And there are not enough people. There are a lot of rejects. Why? Let me give you a few facts with which I am familiar. Just to continue their education, there are deferments for more than 50 percent of the young Muscovites subject to the draft. There are military departments in practically all the VUZ of Moscow, and there are more than seventy. The graduates do not do conscript service, but immediately get certified as officer personnel.

Several percent of the young men have a deferment to pursue their secondary education.

We subtract others who are released for reasons of health, for family reasons . . .

And there are also those who avoid the draft without legitimate grounds. So here is what we get: less than ten percent of the young men of Moscow enter the Army ranks.

The prospect is not a promising one: the birth rate in the capital has diminished markedly. In accordance with the new Law "On military obligation and military service," the number of persons having the right to a deferment is growing even larger.

[Barnev] The situation is, to put it bluntly, a depressing one. What is the solution?

[Bespalov] It is easy to ask, not easy to answer. There are great hopes for the transition to the contract principle of manning the Armed Forces. I'm a practical man from the country, and as I see it, not many "volunteers" will go into the Army for a little money. After all, we have the institution of extended-service personnel, and they too are in short supply everywhere. Will Russia find more money, we have to ask the president that.

But still, I do believe it is possible to lessen the stress involved in the question of manning our Army. For instance, the President's decree on the draft for the autumn of 1992 says that persons who have received a higher education in VUZ where there are no military departments will serve one year. It would not be bad to apply this provision to all VUZ. Whether there is a military department or not, be so kind as to serve out one year, and only afterwards certify as a officer. This would be fair in the social context and would benefit the Army: the intellectual level of the personnel would rise, and the very complex equipment and weapons would be assimilated more quickly.

Another untapped source: raise the legal responsibility of the draftees for avoiding military service. Unfortunately, there are many gaps and omissions in this matter. We have sent hundreds of representations to the Moscow prosecutor's offices to prefer criminal charges based on concrete facts, and only a few have been pursued. Even more rarely do they go to trial. This is what creates a situation of legal nihilism.

[Barnev] It is clear from the statistics, and indeed from our discussion that fitness based on health is less than 50 percent. What is happening to Muscovites all of a sudden? Isn't it medicine which is putting one over on us?

[Bespalov] Let me start with the latter question: it is not. We have especially invited high-ranking specialists to check over the conclusions of one of the medical commissions on 230 draftees. They were all confirmed. Not a single reclamation, as they put it.

But strange as it may seem, it does not then follow that the health of the young men has sharply worsened. It is roughly at the same level as in past years. The explanation is simple: by order of the Commander-in-Chief of the CIS Armed Forces No 436 dated September 1991, the health requirements were made more strict. Taking the long view, this is a good thing. But when resources are limited, it is hardly a good idea to go to extremes. So what is happening now? The airborne troops, the military construction troops, the tankers and the clerks now await nearly identical young people in terms of health. We are literally offering weightlifters both to wield the ballpoint pen and the tank armor. This is wasteful.

But I believe it is not only a matter of a somewhat artificially raised standard of medical requirements. There are also other much more alarming problems. There used to be an adolescent medical service in Moscow, and it proved itself well. It carried the young men for many years and conducted preventive treatment. This made it possible to "catch" the diseases at the initial stage and correct their health. Now this service has practically collapsed. And here is the result.

To this we add the ecology, which of course has not gotten any better, alcoholism, toxics addiction, and drug addiction.

[Barnev] The editors often get letters. "What has happened to our society," writes a veteran of the Great Patriotic War, Komarov, from Yaroslavl. "I remember the esprit with which we entered service. We understood that this was necessary for the country, for the people. But now the time has come for my grandson to serve, and he isn't going any where. He'd rather go to prison, he says. He's so afraid of the Army."

[Bespalov] "Dodgers" and "refusers," and this case too, they are phenomena of the same order. Remember the malicious things they said about the Army, how back in those same perestroyka years they undermined the respectful attitude of the people toward the Army. How much mud and lies were slung in the other papers. Unfortunately, a process has inertia. And the press is also subject to it. That same IZVESTIYA just recently

again began scaring people with the "Tbilisi syndrome," and again they are trying to subject the soldiers, this time the Russian Army, to hostile ridicule.

There are many problems in the organization of joint work of local authorities and military commissariats with the draftees. Some still tend to count this solely the affair of the military commissariats. For fairness' sake I should say that there have been changes for the better. The municipal military commissariat maintains businesslike relations with the Moscow city government. We have good contacts with the leaders of a number of prefectures: Oleg Mikhailovich Tokavech, Vladimir Borisovich Zotov, Valeriy Vitalyevich Parfenov, Aleksey Mikheyevich Bryachikhin. The Moscow authorities have actively participated in the All-Russian Day of the Conscript Soldier. There is other progress as well. But I repeat, it is not enough. We still have a way to go to meet one another, and we must create an attractive image of the Army among the populace.

[Barnev] Nonetheless, as is clear from the same statistics, the majority of draftees express their disinclination to serve in the Russian Army.

[Bespalov] I believe that this also is an effect of the attitude of society toward service in the Army. We are often given the example of the so-called civilized countries. Take Italy for instance. Last year a military delegation of the General Staff and of the Moscow Military District visited that country. Afterwards the Voronezh oblast military commissar shared his impressions: they don't want to serve there either. But they all serve. Both students and farmers.

What is this? First of all, the law operates there, and there is monitoring of compliance with the law. Second, by their laws, a citizen who does not serve in the Army does not have the right to hold state posts.

They have the same system, I believe, in several other countries as well.

We are borrowing a great deal from the West. But we have to borrow better. Let us try in every way to raise the status of the man in shoulder boards. Raise it in all aspects: material, moral, and legal.

Our Russia requires this.

Numbers of Women in Armed Forces

93UM0264B Moscow KRASNAYA ZVEZDA in Russian 10 Dec 92 p 1

[Unattributed news item: "Women Look Good in Uniform"]

[Text] At present around 100,000 women are serving in the Russian Army. Of them, more than 1,100 are in officer positions, while more than 20 thousand representatives of the fair sex wear the shoulder boards of warrant officers. Most of the women are in the Ground Forces, around 30,000, while there are half as many in the Navy and Air Forces. More than a thousand women serve in the airborne troops. The number of women in Army ranks will grow. There are now 169 specialties opened to them in command profiles alone.

Women are selected for admission to military service by rayon (municipal) military commissariats based on the requests of commanders of military units or staffs of military districts, with presentation of the appropriate documents. Unmarried, childless women ages 19 to 40, who meet the health requirements for military and have no less than an eighth grade education, may be accepted for the positions of enlisted person, seaman, petty officer, or sergeant for periods of two years, four years or six years.

Women no older than age 35 with a higher or secondary special education related to the corresponding military specialty are accepted for Army and Navy warrant officer positions.

It is permitted to select reserve officer women up to 30 years of age, who have graduated from high educational institutions in civilian specialties related to military ones, for officer positions. Women can continue in military service up to age 50.

Problems of Women Serving in Armed Forces

93UM0288B Moscow KRASNAYA ZVEZDA in Russian 18 Dec 92 p 2

[Article by Moscow PVO [Air Defense] District Lieutenant-Colonel Gennadiy Belostotskiy, under the rubic: "A View on the Problem": "Epaulettes on Delicate Shoulders"]

[Text] KRASNAYA ZVEZDA has already addressed the problem of women serving in the Armed Forces. However, this subject is far from exhausted. Moreover, today when the issues with the draft contingent are being resolved with such difficulty and thousands of officers are being released into the reserve, the problem of replacing men at combat posts is becoming especially critical.

Already 1-2 years ago, women in the army were perceived as somewhat of a bizarre and sufficiently rare phenomenon. Now they occupy up to 50% of key combat positions—radar and automated command and control system operators, radio repair personnel, radio operators, and plotters—in PVO [Air Defense] Troops subunits. And they are earning their keep.

Lieutenant-Colonel S. Ivanov—commander of a radiotechnical battalion—which I recently visited, said with satisfaction:

"With rare exceptions, our female soldiers have a serious and responsible attitude toward their duties. For example, Radar System Operators Margarita Svyshova and Nadezhda Kalika arrived at our unit in January and they have mastered their specialties better than the men do after two years. I can't imagine what we'd do without them...

I need to add to what has been said that the women also perform combat alert duty and are also preparing potatoes for the battalion for winter... In a word, they are carrying out tasks in nearly all of the sectors, including the most difficult. Are their lives the better for it? Certainly not, But such is reality. The situation is even more difficult at other sites. For example, there were a total of only 10 soldiers left at an independent radar company that is subordinate to Lt Col Ivanov. He could only really help the commander, Captain S. Bondal, with advice: cherchez les femmes—look for women. And the captain found 17 women. And by the way right now that company has been recognized as the best in Moscow PVO District.

But what attracts a pretty thing into the army, in which, according to the regulations, you need to stoically bear hardships and deprivations? The salary is a little more than four thousand rubles. In the city, people receive a bit more in other jobs. Benefits? Thirty days of leave, plus travel time, plus payment of the rail fare—is certainly an incentive. But not a very substantial one. Then what is it?

"Alas, the 'budgeteers' now earn even less," Ira Vinokurova, for example, justified her decision.

Having graduated from the institute, she worked at a school for a year. She spent a lot of time on the road. But here, at the site, everything is at hand. Yes and the combat specialty suits her.

Vinokurova was pleasantly surprised that the soldiers don't pester her and, admittedly, they are a little bit afraid of her. They even don't curse in her presence. Incidentally, the NEW YORK TIMES recently wrote that many female servicemen in the American army are being released because of the fear of being raped and they are tired of the jokes and crude solicitations. In our country, at least for now, women sooner solve the problems of marriage in the army. And many women in the battalion have already found their future husbands.

And still fear about the future "drives" the majority of women, however, to military service. Production is being drastically curtailed in the city and enterprises are also being totally shut down. The threat of unemployment is a reality for many women. Therefore they are perceiving the invitation to serve as a gift of fate and they come to commanders ready for any conditions. And here incidents occur.

We might as well admit that some commanders, seeing this and knowing the situation, force them to immediately write a request for release without a date. Why? So later it is easier to stress their power in every way: for a refusal, say, to wash the floors in the headquarters building, or for being late for cleanup work they can

lower the salary or deprive them of their bonus. And they can also release them. Indeed, such cases are still not that frequent but, alas, they are occurring...

Where their senior commanders and the women themselves have rallied, high-handed commanders have been put in their place. Yes and today life itself is forcing army leaders to regroup: they are not treating male and female soldiers the same way, they are studying and taking into account the specific features of women's psychology, and they are learning flexibility in commanding women's collectives. The main thing is something else. Is the forced reliance on women proving itself, if you ask based on the big picture?

You will agree that the service of women in the army is unnatural. Sitting for hours in front of a radar screen, maintaining sight and the nervous system in constant tension, and experiencing the psychological loads is not a female thing. And how do they service the equipment? They are incapable of doing many things, even right now, in peacetime. For example, women are simply physically incapable of dragging heavy electronic components from a rack for servicing and repair, of disassembling engines, clambering up antenna systems, or conducting adjustment work... Already not talking about the situation that is most similar to combat. Here a healthy male is also tired out who falls over after a march. For now officers, warrant officers and soldiers do the rough work for the women. But what if the percentage of female soldiers in subunits increases tomorrow? And not only in the PVO Troops? In any case, the experience of the Western countries attests to that. Will we then be able to ensure the former high discipline and combat readiness?

"Or course not," thinks Moscow PVO District Radiotechnical Troops Deputy Chief Col A. Rudak. "It turns out that the fair sex make good specialists but I think that the number of female personnel in the troops should not exceed 25%...

Right now, the matter is proceeding to the point that, as they told me at the cadre directorate, nearly every third specialist in the district will soon be female. Why? First of all we will not fulfill the plan for conscripting young replacement troops. Second, many junior officers who have encountered social problems in the army are writing their requests for release from the Armed Forces. The demands for the age requirement have become more strict...

What is the solution? I had the opportunity to discuss this problem at headquarters, subunits, at sites and to talk with many officers. What do they suggest? The troop strength reduction process is occurring. So why not bring the PVO Troops manning up to full strength at the expense of other Armed Forces branches and combat arms whose significance has been reduced today? Obviously, we need to think about the methodology of troop reductions. Their number is being reduced but the number of units and the combat tasks being fulfilled by

them remains as before. So, wouldn't it be better to also reduce the units themselves but make the units that remained, as they say, full-fledged and fully manned and not "female".

In a word, no one is against women serving in the army, including in combat positions. But we still need to strive so that the conditions of service are acceptable for them and so that women's psychological peculiarities, the mentality of the female character, and physiology are taken into account. And they should be permitted in only approximately 25% of the positions and posts at a unit with full manning of authorized positions. Hence the conclusion: the percentage of women should not be higher than these figures.

I traveled from the unit to the train station in an ancient, rattling bus along with shift personnel. The dim light softly outlined the very young faces of my fellow travelers. They all seemed to be to be attractive and nice. And it was pleasant to listen to their chatter. But one thing made me sad. For me and for all men for whom fate has shifted the responsibility that is now destined for delicate shoulders...

New Book Gives Declassified Statistics on Soviet 1918-1989 Military Losses

93UM0295B Moscow KRASNAYA ZVEZDA in Russian 31 Dec 92 p 3

[Russian Federation Ministry of Defense Press Service Article: "The Secret Security Classification Has Been Removed: 'USSR Armed Forces Losses in Wars, Combat Operations and Military Conflicts"]

[Text] "Poteri Vooruzhennykh Sil SSSR v voynakh, boyevykh deystviyakh i voyennykh konfliktakh" [USSR Armed Forces Losses in Wars, Combat Operations and Military Conflicts]—that is the title of the book that has been published by Voyennoye izdatelstvo [Military Publishing House]. The book is a statistical study of the losses of personnel and military hardware of the Soviet Armed Forces in wars, combat operations and military conflicts during the period from 1918 to 1989.

Until recently, this information was maintained under a security classification of "Secret". Systematic information on the personnel losses of the Soviet Armed Forces during the last seven decades are completely set forth for the first time in the collective work (V.M. Andronikov, P.D. Burikov, B.B. Gurkin, and others; edited by G.F. Krivosheyev).

The greatest number of irretrievable personnel losses occurred during the two most severe wars—the Civil War (1918-1922) and the Great Patriotic War (1941-1945). Based on the results of calculations, during the years of the Great Patriotic War (including the campaign in the Far East against Japan in 1945) the total irretrievable demographic losses (killed, missing in action, captured and did not return from it, those who died from wounds, diseases, and as a result of accidents) of the

Soviet Armed Forces along with the border and internal troops totaled 8,668,400 men. In the process, the army and the navy lost 8,509,300 men, the internal troops lost 97,700 men, and the border troops and state security organs lost 61,400 men.

The country's total direct human losses during all of the years of the Great Patriotic War are assessed at approximately 27,000,000 people. They include servicemen and partisans who were killed in battle and those who died from their wounds, peaceful Soviet citizens who died from hunger or disease and who died during bombings, exchanges of artillery fire, and punitive acts, and prisoners of war and underground patriots who were shot and tortured in concentration camps.

The process of removing the classification from the losses of Red Army personnel in combat operations and military conflicts during the interwar period (1923-1940) in our country "has been dragged out for a long time".

During the indicated period, Red Army irretrievable combat personnel losses (killed, died from wounds or disease, prisoners who did not return and missing in action) totaled 139,100 men. In the process, the greatest number of them are due to engagements to repel Japanese aggression in the arena of the Khalkhin-Gol River in 1939 (8,931 men) and in the Soviet-Finnish War of 1939-1940 (126,875 men).

Combat irretrievable losses among Soviet servicemen who were participating in rendering international and military-technical assistance to other countries, and also in the elimination of border military conflicts (1950-1989) totaled 16,100 men, and of them 14,453 were due to the war in Afghanistan. Soviet Army command and control organs and division-sized and smaller units lost 13,833 men, KGB subunits-572 men, USSR MVD [Ministry of Internal Affairs] formations—28 men, other ministries and departments (Goskino State Committee for Cinematography], Gosteleradio [State Committee for Television and Radio Broadcasting], the Ministry of Construction and others)—20 men. Four hundred seventeen servicemen ended up as prisoners or missing in action, of which 119 men were released (97 men returned to the Homeland, and 22 men are in other countries).

The primary task of the statistical research—is to provide objectively set forth, factual, numerical material to historians, publicists, military cadres, and a broad circle of readers of summaries. The author's collective is continuing its consistent work on the subject of this monograph. Historians from Austria, England, Bulgaria, Hungary, Germany, Spain, Italy, Canada, China, Poland, Romania, the United States, Finland, France, Czechoslovakia, Yugoslavia, Japan and other interested countries are being invited to conduct research as co-authors.

CIS: POLICY

Yeltsin Edict on Provision For Former-Servicemen

93UM0218A Moscow ROSSIYSKAYA GAZETA in Russian 21 Nov 92 p 6

[Russian Federation Presidential Edict No 1474, dated 23 November 1992, signed by Russian Federation President B. Yeltsin, Moscow, the Kremlin, 23 Nov 1992: "Russian Federation Presidential Edict 'On Making Additions and Changes to Russian Federation Presidential Edict No 154 dated 19 February 1992 "On Measures for Increasing Social Protection of Servicemen and Individuals Who Have Been Released From Military Service" "]

[Text] For the purpose of further increasing the social protection of servicemen and individuals who have been released from military service, I resolve:

1. To make the following additions and changes to Russian Federation Presidential Edict No 154 dated 19 February 1992 "On Measures for Increasing Social Protection of Servicemen and Individuals Who Have Been Released From Military Service":

to Paragraph 4 after the word "housing" insert the words "regardless of their size" and replace the words "and departmental" with the words "and municipal, including that which has been transferred to the total management of enterprises or to the operational management of institutions":

place the following wording in Paragraph 6:

"6. Establish that officers, army and naval warrant officers, and compulsory service military personnel who are on active duty and also those who have been released from military service due to age, illness, staff reductions, or limited health conditions and who have 20 or more calendar years of service are paid an amount that is 50% of the rent and also utilities in that same amount regardless of who owns the housing for all of the housing in state and municipal housing occupied by them and their family members";

add Paragraphs 9 and 10 with the following content after Paragraph 8:

"9. Conduct the award of benefits provided by Paragraphs 4, 5, and 8 of this Edict in accordance with the documents issued by military administrative organs that confirm the right to these benefits.

10. Provide official housing at the duty local for the period of service to those active duty officers, army and naval warrant officers and compulsory service military personnel upon their transfer to perform service at another location who have their own housing, apartments (parts of homes), and also those who are members of housing construction (housing) cooperatives";

Number Paragraphs 9, 10 and 11 of the Edict paragraphs 11, 12 and 13, respectively.

2. This Edict enters into force in the manner prescribed by the 5th RSFSR Congress of People's Deputies Decree "On Legal Support of Economic Reform", dated 1 November 1991.

[Signed] B. Yeltsin, Russian Federation President Moscow, the Kremlin 23 November 1992 No 1474

Impact of Reform on General Staff

93UM0269A Moscow KRASNAYA ZVEZDA in Russian 11 Dec 92 p 2

[Article by Colonel Vladimir Kharchenko: "The General Staff Under New Conditions": "Military Development: Problems and Solutions"]

[Text] The activeness with which the mass media discuss the problems of Russian security, present-day life in the Army and Navy, and the future of the Armed Forces is understandable. Now it is possible to tell people about what just recently was considered off limits to the press. But is this benefit always used intelligently from the standpoint of Army interests and the security of the Fatherland? A representative of the General Staff shares some of his views on this matter, at the request of the editors.

By the nature of my job, I must work in direct contact with representatives of various subunits of the General Staff. Thus I have the honor of knowing by sight, as they say, people who are distinguished by high professionalism, and if I may use the lofty style, by selflessness in accomplishing their service duty. But then you read some article on an "army" topic and you are amazed: the glib approach to problems of the Armed Forces, the simplified interpretation of factors associated with their reform, the recommendations, based on who knows what, about who should do what, and then the entirely unsubstantiated assertions that reform, as they put it, is only occurring in words.

Meanwhile, the facts say something else again. Despite the objective and subjective difficulties, we have already succeeded it doing quite a lot in the area of military development. The Ministry of Defense and the General Staff, and the necessary command and control organs have already been formed. We are reorganizing practically all structures of the Armed Forces from top to bottom. We are working on questions of coordination with the organs of state authority both at the center and in the provinces. We have begun to form new groupings of troops. We are resolving questions of social protection of service members. In addition, we have developed a number of fundamental documents: The Concept of Security of the Russian Federation: the Law on Defense: the State Program for withdrawal of troops from the territory of other states, and for their disposition and

accommodation; the Concept of Development of the Armed Forces; drafts of military doctrine, the State Program for provision of housing to service members discharged from active duty, and much else. Some laws, including the law on military obligation and military service have already been adopted by the Supreme Soviet, which will undoubtedly promote the development of the Armed Forces and their reformation.

Quite naturally, the changes had to affect the General Staff as well, as the operational command and control organ, the "brain" of the Army. In developing the organizational structure of its directorates and departments, we allowed for the fact that it should be flexible and that if necessary it is able to efficiently adapt to changing missions on the basis of existing personnel. For example, it is no secret that the missions of the General Staff in peacetime and in war differ greatly.

The General Staff must perform a wide spectrum of "unscheduled" missions, from participation in events in so-called "hot spots," to direct leadership of elimination of the consequences of technological catastrophes (Chernobyl) and natural calamities (the earthquake in Armenia and so forth), and organization of harvests.

Selection and assignment of cadres is an important part of the work of the General Staff in the period of its development. For the first time this work has been carried out on a competitive basis. Primarily candidates to the posts of chiefs of the leading directorates and departments competed. There were more than enough of them. As a rule the selection was from among three to five candidates. The basic selection criteria were competence, professionalism, effectiveness of thinking, practicality, the ability to work with people, the capacity to foresee events, and line unit and staff experience. This made it possible to man the corresponding subunits with the most effective, creatively thinking young and promising officers and generals. Naturally we paid special attention to preserving the creative, professional potential of the collectives of the main directorates, and to assuring the continuity of the best general staff traditions.

As a result of structural changes, the numerical strength of the General Stair was reduced by more than 35 percent. The number of general slots was reduced from 235 to 173 and the number of directorates was reduced from 17 to 12. Some were abolished, others redesigned, and some eliminated from the General Staff. Thus the organizational structure of the General Staff at present has been made to maximally accord with the missions assigned to it.

But this certainly does not mean that the General Staff has worked only at its own reform. There is planned, purposeful work under way on a number of priority tasks of military development. One of these, specifically, is the development, in a maximally short time, of defensive groups of troops on the territory of the Russian Federation which are capable safeguarding the borders and air space of Russia, and halting any possible provocations or encroachments on its

sovereignty and territorial integrity. Here we proceed from the fact that in any case we must maintain the capacity for adequate buildup of military might of the Armed Forces when there is an increase in the military threat. This requires an organic combination both of elements of military development and of military art. At the basis of this work lies the principle of the most reliable safeguarding first of all of the most important axes by covering troops, and by mobile forces intended chiefly to reinforce the covering troops and reserves in any threat axis. Here, considering the geostrategic situation of Russian and its strong Ground Troops, combat-ready operational and tactical formations should form the basis for development of the new groupings.

Today life forces us to depart from traditional practices, in which the strongest and most combat-ready groupings of troops were deployed on the periphery of the USSR, next to its borders, and also in the groups of forces on the territories of the member countries of the Warsaw Pact. As you know, they were comprised as a rule of powerful tank and combined-arms operational and tactical formations, air strike groupings, and tactical nuclear weapons. Thus approach generally assured repulse of external aggression against the Soviet Union from all possible axes. At that specific historical stage this was justified. But today we can no longer be guided by such views.

The General Staff is also searching for an optimal correlation of armed services and combat arms, and is deciding what forces and assets should be given preference. Here there are many controversies, variants, opinions and proposals. But undoubtedly priority is given to the forces and assets intended to warn of possible aggression and to assure reliable repulse of air and missile strikes, and to mobile general-purpose forces.

New approaches are also required today with respect to organization and leadership of operational and combat training. Here too there are problems and difficulties. The instability in a number of regions, the need to accomplish suddenly arising missions forces us to shift the deadlines for the planned measures, to reduce the volume of questions to be handled, or to quit handling them altogether. The cuts in appropriations to train troops and staffs, the increasing shortage of personnel, the disruptions in logistical and technical support also have an effect. In addition, the troops withdrawn to Russia from other states and "hot spots" very often return essentially to unprepared garrison areas, without accommodations and training facilities. Much time is spent on resolving problems, and not on organization of planned combat training and operational training.

Steps are indisputably being taken in this area. In particular, basic emphasis in troop training in 1993 will be put on the command-staff method of conducting measures of operational training, on tactical and fire training, and on teamwork of units and subunits.

Indisputably the General Staff, as it continuously adjusts and frequently rewrites current and prospective documents aimed at supporting the work of troops and forces, and at their maintenance in continuous combat readiness, also requires scientific recommendations and justifications. In this regard, the importance of military science greater than ever before. It is required to be especially responsive and preemptive. Miscalculations in resolving urgent problems are impermissible now. In order to avoid them, we need an exceptionally precise assessment of many objective and subjective factors of the political, economic and strategic situation and all tendencies of development of military affairs. However to this point we have not perceived a due return from the potential of military science research, which is concentrated in military educational and military research institutions of the Ministry of Defense.

We have many problems also of an internal, General-Staff nature, so to speak, whose resolution will simply require time. In this regard, I would hope for an understanding of the missions and Army problems on the part of all society, all Russians, and their support, for only by our joint efforts can we achieve the desired result.

CIS: STRATEGIC DETERRENT FORCES

SS-25 Mobile ICBM System Described

934P0046A Moscow KRASNAYA ZVEZDA in Russian 20 Nov 92 p 2

[Article by KRASNAYA ZVEZDA Correspondent Major Aleksandr Dolinin: "The RS-12M: It's Easy to Change the Launch Site"]

[Text] [SS-25 is Western designation for the RS-12M]

The RS-12M mobile groundbased missile system that has been named Topol [poplar] in everyday use is considered to be one of the most successful systems in the Strategic Missile Forces at the present time. We had 288 launchers of this type at the moment the START Treaty was signed. Approximately two-thirds of them are on Russian territory and the remaining ones are in the Republic of Belarus.

Of course, the main thing in this system is the missile. It is an intercontinental, single warhead, solid fuel missile. Its throw weight is equal to one tonne. The missile is manufactured in Votkinsk, weighs approximately 45 tonnes, and spends all of "its life" in a special launch canister that is 22 meters long and two meters in diameter.

The one-hundred tonne launcher with extremely solid dimensions has surprising mobility. Everyone who has seen it on our soggy unpaved country roads and in openings in the forest, in quarries or in snow-filled ravines, where not a single transport vehicle will travel other than tractors and tanks, have assessed the talents of Minsk automobile builders (they manufacture the sevenaxle chassis) and of their neighbors in Russia and other countries of the Commonwealth by its features. Yes and the entire launcher as a whole, that is assembled by Volgograd machine builders, causes delight among connoisseurs of modern equipment



The system which was placed on alert duty in 1985 has turned out to be reliable. The test of time which the hardware has undergone has shown that it is as safe in operation as any other heavy automobile transporters. The missile has also justified expectations and all launches of the missile at the test range have been successful and have confirmed its high qualitative specifications.

On the whole, the RS-12M strategic missile system is an alloy of the most modern technologies. The missile's solid fuel engines are the combination of the leading achievements of chemistry and materials technology They have no equals in the world based on the combination of cargo capacity and off-road capability of the self-contained chassis. The command and control system apparatus with the onboard computer suite, the diverse collection of command and control, communications and monitoring systems for a mobile launcher, the energy supply, topographical-geodesy, and azimuth guidance systems and many others that are inherent only to this system meet the strictest demands. It has absorbed in itself all of the best that has been developed in missile production to this day. The outstanding collective of the Moscow Institute which was headed by A. Nadiradze for many years deserves a great deal of credit for that.

And now about the main thing. What will happen if the launch order is received? The self-propelled missile launcher stops at any point of the route. The combat command and control apparatus comprehensively reverties the authenticity of the order and turns on the automatic algorithm of the launch cyclogram. The self-propelled vehicle is frozen in place, having placed the wheel brakes in a vise-like grip. Powerful hydraulic jacks are extended along the sides of the transporter and the horizontal leveling of the launcher begins automatically. Further launch preparation operations (with the exception of certain ones) are no different than those that are customary for other missile systems.

CIS: GROUND TROOPS

Preparation of Special Eq. pment for Storage

93UM0278B Moscow TEK!. NIKA I VOORUZHENIYE in Russian No 8, Aug 90 p 21

[Article by Lieutenant Colonel A. Gusev: "Preparation of Special Equipment for Storage"]

[Text] In this article, special equipment is understood to be—missile complexes, radio systems, electronic equipment, mobile reconnaissance and surveillance posts, mobile weapons and survey control servicing and maintenance (repair) systems.

Preparation of special equipment for storage consists of three stages: preparation for mothballing, mothballing, and placing equipment into storage. Perform repairs or maintenance on the equipment before mothballing it. If the equipment is in operation, perform servicing or maintenance No 2 (TO-2) or medium (major) repairs

(SR, KR). Equipment that is in storage is subject to routine preventive maintenance (RR) upon expiration of the prescribed time period. Remove all batteries from equipment and place them into storage in a building that has been specially configured for that purpose.

We recommend conducting mothballing immediately after repairs, servicing or maintenance. The "static air drying" method is used which consists of removing the humidity from the air that is located in the sealed area of the body using a moisture absorbent and by saturating that space with vapors from a universal corrosion inhibitor

If the equipment that has undergone maintenance of repair has been transported to the storage area under its own power, you need to clean the dust, dirt, moisture and products of corrosion from it and lubricate its drive train and also the external surfaces of the body, cab, or fighting compartment beforehand, using washing solutions (MS-8, "Vertolin-74", or "Impuls"). You also need to remove the dust from the internal surfaces of the fanpipes and sections, and, use compressed air to blow dust off hoods, cabinets and components. We recommend wiping the interior walls of the body with a dry cloth and the panels of the cabinets and components that are painted with a "moire" type lacquer with a damp brush Clean the walls of the cabinets and instruments with a soft rag. Remove the batteries and ship them for storage Wipe cables and rubber-technical parts with a clean rag

Experience proves that it is best to carry out mothballing of the special part of the equipment in the following manner. First, fill the gearbox with AUP oil or NG-203B oil (AU axle oil with 10% AKOR-1 additive). Then. check that the hydraulic system is full of MGE-10E Oil (or with another authorized oil or with a special liquid) and lubricate all parts of mechanical assemblies in accordance with the khimmotologicheskiy [not found] chart (the lubrication chart). Do not lubricate the sockets and contact plugs of the cable connector assemblies, rotating joints of feeders, or other types of contact connections degrease them and, if they are outside the sealed area. wrap them in two layers of waxed paper and tie them with dessicated twine. Cover the unpainted surfaces of metallic parts, including the chrome and nickel surfaces of knobs of components, cabinets, and switches with a layer of MZ (GOI-54p) oil and then wrap them in waxed paper and tie them with dessicated twine

Leal all of the body's hatches and doors (other than the entrance). To do that, use "Gerlen-D" sealing tape that has been cut into strips of the desired width. We recommend cutting it in strips with the calculation of overlapping the width of the sealed crack by 2-3 cm on each side. Seal the ventilation vents with 500 or TT cloth and lubricate the joints of the cloth with a sealed surface using U-20A or 51-G-7 sealant.

Experience has shown that it is advisable to conduct the sealing of the ventilation vents in the following manner First, cover with a sealing fabric (with a margin of 40-50 mm on each side). Then, apply a thin layer of 88N glue

(for 500 fabric) or KT glue (for TT fabric) on the border, in places on the fabric and on its edge (a 40-50 mm strip) where it will adhere after which let it dry in the air for 5-7 minutes. Apply another layer of glue and once again let it dry for 7-10 minutes. Lay the fabric cutout on the glue-covered surfaces and firmly press it for several seconds.

You need to turn on the filament voltage and the electric heat in the body for 45-50 minutes before putting silica gel in it. Then, put the silica gel in it. Package the silica gel in small bags (300-400 grams each) and place them evenly throughout the interior of the body (1 kilogram per 1 m³ of area).

Place 15-20 cm width sheets of MBGI-8-40 inhibitor paper on the units and cabinets in the body with the calculation of 1 m² per 1 m³ of sealed area. Seal the entry hatch using U-20 (51-G-7) oil or "Gerlen-D" tape.

Remove measurement devices that are part of the vehicle spare parts kit in the event they are stored in unheated buildings or in outdoor open storage areas and store them separately.

Do not additionally seal the spare parts kits that are located in the body but lubricate the fitting tool with just a thin layer of M3 oil and wrap it in waxed paper.

Seal individual components separately just like you seal the body, including spare parts kit boxes that are an individual component of the vehicle but that are not located in the sealed cabs.

Prepare the basic vehicle and the undercarriages of trailers for storage in accordance with the requirements of the leadership for storage of motor vehicles.

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Storage of Tanks and Armored Vehicles

93UM0278A Moscow TEKHNIKA I VOORUZHENIYE in Russian No 9, Sep 90 pp 2-4

[Article by Major-General N. Zhuravlev, First Deputy Chief of the GBTU [Main Tank Directorate], and Colonel B. Pechenkov, Section Chief and Candidate of Technical Sciences: "Storage of Tanks and Armored Vehicles"]

[Text] Reform of the Armed Forces and also the reduction of its strength that is resulting from the provisions of the new Soviet Defensive Doctrine along with other tasks require large-scale and efficient resolution of the issues associated with the storage of tanks and armored vehicles. The need that has arisen as a result of this to place a significant number of combat vehicles into long-term storage in various climactic regions, including in open storage areas, places a great deal of responsibility on all of the elements of the Ministry of Defense Main Tank Directorate, deputy commanders for weaponry, armor service chiefs (BTS) and the specialists who are subordinate to them.

Creation of weapons and vehicle storage facilities (BKhVVT) and expansion of theoretical research in the sphere of the vehicle "storageability" are among the organizational steps being taken to carry out this task. These issues are the topic of thorough review at military council sessions and also while conducting methodological training assemblies with supervisory personnel.

At the present time, we must devote special attention to the comprehensive inspection of the condition of the combat vehicles before placing them into long-term storage at these training assemblies when we discuss the issues of placing vehicles and weapons into storage. Do that, as a rule, during servicing and maintenance No 1 and No 2 (comprehensive in nature, frequency, location conducted and maintenance and logistics support). In the process, the appropriate services are enlisted to carry out the work. Chiefs of services or individuals appointed by them, must personally determine the condition of the vehicles and take steps to eliminate the shortcomings noted and organize the efforts of special teams or crews to prepare the assemblies, mechanisms and systems inspected by them for long-term storage and mothballing. For example, a RAV [missile and artillery armament] service representative checks artillery weaponry (tank cannons, machineguns, gunsights, and stabilizers) and a communications service officer checks the radios and intercom systems

Chemical service representatives are involved with PAZ [atomic defense] systems, including PRKhR [radiation and chemical detection device] and PKhZ [chemical detection device] instruments and rear services representatives inspect the quality of POL [petroleum, oil, and lubricants] and special liquids, and the condition of protective tarpaulins. Medical workers check the completeness and quality of medical equipment, and the engineer service checks the completeness and quality of its special equipment. Tank service officers inspect the technical condition of the drive train, transmission, power plant, and special electrical equipment and also the completeness and correctness of the entries in the operating and servicing documents.

Create teams of specialists from the unit's repair subunit and from battalion servicing and maintenance sections to carry out complex inspection and adjustment procedures or in cases when you need to utilize special diagnostic equipment, including mobile servicing, maintenance and repair instrumentation (MTO [maintenance] machine], KPM [not further identified], MES [not further identified]). Carry out all required operations directly on the vehicles or at specially equipped posts. Representatives of the appropriate services develop maintenance procedures checklists for each team or post which contain a list of the work and maintenance and servicing procedures and also a schedule of the order for carrying out inspection-adjustment operations by subunits (the checklists are approved by the unit deputy commander for weaponry).

Experience has shown that the opportunity will simultaneously appear to detect and eliminate existing defects in the vehicles during the qualitative conduct of a comprehensive inspection of the condition of tanks and armored vehicles while preparing them for long-term storage. Thus, a good foundation is laid for maintaining the vehicles at a high degree of readiness.

The use of effective methods, techniques and materials to protect parts from corrosion and deterioration that ensure tanks can be maintained for long periods of time and reduce the labor-intensity of their maintenance during that time is another, no-less-important, factor to increase vehicle storageability. For example, in this regard it is advisable to utilize operating parts preservative consumables and to seal the vehicles using moisture-resistant materials along with drying the air.

Get RK [operating parts preservative] POL by introducing a certain amount of corrosion inhibitors into the operating fluids. Their use ensures reliable protection of the parts of engines, assembly units, transmissions, the drive train and weaponry from electrochemical [galvanic] corrosion. Furthermore, the degree of corrosivemechanical wear of friction surfaces is significantly reduced, parts service life is extended, and vehicle maintenance-free performance indicators improve which permits us to reduce expenditures for repair work and spare parts. The advantage of operating parts preservative POL over preservatives consists of the fact that the need to de-mothball objects (the engine, weaponry, and others) declines when bringing them up to combat readiness. So, the time and labor-intensity for preparing combat vehicles for use is significantly reduced.

Experience has shown that the use of KAM-25 (TU 381011412-83) operating parts preservative oil to protect tank cannons or KRM (TU 401198-77) for machineguns instead of GOI-54p, RZh, or VO TOE oils permits us to reduce the labor-intensity of carrying out these operations by 1.1 and 1.15 times, respectively. In the process, the required quantity of preservative materials and diesel fuel used to service weaponry is reduced by 3.7-8 and 8-10 times, respectively, TS-1 by 4.6 kilograms, and swabbing materials—by 0.6-0.7 kilograms. The working capacity of tank weaponry (during combat firings) is preserved without de-mothballing at temperatures of up to minus 40°C, thanks to which the preparation time for combat utilization of tanks and armored vehicles has been reduced by 18 and 40%, respectively.

KAM-25 and KRM have been used in military districts with various climactic conditions on first and second generation postwar tanks. In the process, their high effectiveness has been proven. Forecasting has also been conducted of the protective capability of various oils and it has been ascertained that KAM-25 protects cannons from corrosion for 20 years and KRM protects machineguns for 10 years. Protection of engines from corrosion for 15 years without re-mothballing is provided when mothballing tank engines using M16-IXP3 (MT-16p) oil with 18 plus or minus 2% KP additive (GOST 23639-79) and with DZ

diesel fuel with 10 plus or minus 2% KP additive. You can reliably protect drive train parts for up to 10 years using LITOL-24rk operating parts preservative oil.

At the present time, use partial and total sealing of objects and dry the air with silica gel up to a moisture level of less than 60% during long-term storage of tanks and armored vehicles. In the process, corrosive processes practically do not occur and deterioration processes are significantly delayed. The "Zakleyka" [Adhesive], "Poluchekhol" [Semi-Protective Cover] and "Kokon" [Cocoon] techniques for partial sealing were developed in the 1960's and are primarily suitable for first postwar generation tanks (T-54, T-55, and T-62). Second postwar generation tanks (T-72, T-64) have been equipped with complex equipment suites, elements of which are located not only within but also outside the hull. Therefore, this long-term storage technique is unsuitable for them.

We must point out that partial sealing has a number of shortcomings, the primary one being that, in the storage process, nearly 70% of the moisture inside the vehicle penetrates not through the preservative materials (polyethylene films. TT cloth, and "Kokon" material) but through elements of the hull and turret, including sections of the unwelded armor, hairline cracks, ill-fitting hatches, and gaskets. Defects are also possible in places where the sealing materials are glued (sewn). All of this results in the reduction of the maximum storage time for tanks and armored vehicles and to replacement of silica gel by a factor of 2.5-3 in contrast to what would occur if total sealing was carried out. The labor-intensity of vehicle maintenance and the storage process increases accordingly. In the conditions that have been created, when the reduction of personnel is occurring, this can result in formal completion of vehicle maintenance operations or will exclude its conduct in general.

At the present time, work has been conducted that is directed at discovering the possibilities for increasing the storageability of tanks and armored vehicles, including those that are maintained in open storage areas. It is advisable to use their results when placing tanks into long-term storage. In the process, we must take into account the specific design features of specific types of vehicles. Furthermore, difficulties exist with the supply of sealing and other materials and therefore it is advisable to resolve differentially the question about placing vehicles into storage. So, we recommend storing first postwar generation tanks (until the T-62, inclusively) of early production with high engine mileage without sealing the hulls. In summer, during dry weather you must remove the tarpaulins from them and open the hatches, including on the bottom of tanks for air circulation and for removal of zones of stagnant air.

You need to place first postwar generation vehicles of later production and with the lowest engine mileage into long-term storage under approved protective tarpaulins while carrying out in the process partial sealing with the utilization of OPVT sequipment for driving tanks underwater] elements (other than the air-feed tube). Experience has shown that a relative humidity of up to 60% is maintained within T-54 and T-55 tanks for 18 months when they are sealed in this manner and when 30 kg of silica gel are loaded into each vehicle. We need to point out that, with that identical quantity of silica gel contained in a tank, the period until the silica gel is replaced in a vehicle that has been sealed using equipment for driving tanks underwater is 2-3 times greater than in a tank sealed using the "Zakleyka" method. The recommended method is reliable and simple and does not require additional material expenditures. At the present time, the effectiveness of using elements of equipment for driving tanks underwater is being verified for second postwar generation tanks.

The method of total sealing in sleeve-shaped protective covers when storing tanks and armored vehicles has recommended itself well. However, due to the inadequate mechanical durability of polyethylene film, it cannot be used in open storage areas. An additional protective covering, for example, an approved tarpaulin, does not provide it sufficient protection from the effect of wind and snow. Furthermore, the sealing material is destroyed in the places where it comes into contact with the tarpaulin.

It is most advisable to erect canvas tents in open storage areas. Canvas tents are suitable for maintaining all brands of tanks and armored vehicles in practically all climactic regions. Thanks to their use, the covering is protected from destruction, the opportunity will appear to realize all of the advantages of the total sealing method, and also reduction of the labor-intensity of work on servicing and maintenance of tanks during long-term storage.

It is simple to make that type of tent. It consists of a metal frame and three tarpaulin panels (a cover panel and two end panels). The design suggested in the article "Khranenie voyennoy tekhniki v chekhlakh [Storage of Military Vehicles in Protective Covers] (TEKHNIKA I VOORUZHENIYE, 1989, No 8) can serve as the frame. You can make it at the unit repair shop, using 43 X 2 mm pipe to give it more rigidity.

Set up the frame that is made from separate sections on the area that has been prepared to park a tank (it is prepared in the same way as for storage of a tank in a sleeve-shaped protective cover) and attach it to the ground using wire braces and adjustable braces. Secure wire braids to the upper portion of the frame to prevent the tarpaulin from hanging in the openings. Turn the lower edges of the covering under the longitudinal support tubes and secure them using wire. Lay strips of 2-3 layers of ruberoid [roofing felt] under the tubes in order to prevent the tarpaulin cloth from touching the ground. Wrap the end edges of the covering panel around the

frame tubes from the inside and secure the panel longitudinally using wire. Secure the lower edges of the tent end panels to the ground with heavy-duty rings and spikes.

A method to store tanks in protective covers, consisting of two parts (upper and lower) connected by "lightning" fasteners, was also demonstrated at armed forces supervisory personnel training assemblies. At the present time, work is being conducted for the development of the material for the manufacture of these protective covers.

A static method is being widely used to dry the air in a sealed area when vehicles are stored in the troops. It is characterized by the rapid reduction of the relative humidity of the air in the object when loading silica gel (up to 2%) and its slow increase in the storage process (up to 60%). However, low relative humidity (up to 40%) has a negative impact on the operating properties of nonmetallic materials (rubber, polymers, insulation glues, and others). Furthermore, the possibility of loading silica gel that has lost some of its drying capability or not replacing it in a timely manner have not been excluded and the operation itself is quite lengthy. All of this results in a reduction of the storageability of tanks and armored vehicles.

At the present time, group storage of tanks and armored vehicles with dynamic air drying is being introduced. The essence of this method consists of the maintenance of regulated relative humidity in an isolated space (in a protective covering with a tank in it) by periodically blowing dry air through it. A production line consisting of air drying (blowing) and adsorbent (silica gel) regeneration systems and also pipelines to the protective covers with the models of tanks and armored vehicles have been developed for this purpose. The first three elements are designed to be part of the dynamic air drying system. In the process, the adsorbent have been installed parallel to the pipeline systems, thanks to which their alternate functioning both in the system of blowers and also in the adsorbent regeneration system has been ensured.

Control of the air blowing is carried out through an automatic switch or by turning off an electric fan once the maximum upper (55%) or lower (40%) limits for the relative humidity of the air have been attained within the sealed object. A spectrum-type humidity sensor in the vehicle is the control element. Switching the adsorbents from the air drying mode to regeneration is also carried out automatically. An electric air warmer and the regeneration system's electric ventilation system are turned on and off based on a command from the humidity sensor that is located in the adsorbers.

Five years of experience of storing 22 BPM-2's [sic] in sleeve-type protective covers made from 200-micron stabilized polyethylene film has proven that the utilization factor is 1.0-1.4% under moderate climactic conditions. At the present time, systems have been introduced to maintain 32 or 72 objects. In the process, it has been noted that

the economic indicators are improving practically proportionally to the increase of the stored objects.

The experience of operating a production line has demonstrated that we will recover the expenditures for the system in 2.7 years with total automation of all maintenance operations (drying the air and regenerating the adsorbent). Furthermore, the storageability of the nonmetallic construction materials of the tanks and armored vehicles increases as a result of restricting the lower limit of the relative humidity of the air which permits us to reduce the volume and increase the periods between maintenance in the storage process. It will be feasible to use group storage of tanks and armored vehicles in open storage areas with dynamic air drying after industry has completed the development of sealing materials for use in open space storage areas.

The MTO-TKh shop maintenance manual, based on MTO-80, has been developed to render assistance to the troops in placing tanks and armored vehicles into longterm storage. It has been designed to carry out work on preparing practically all types of combat vehicle systems for storage, for mothballing units and assemblies, for sealing armored hulls and also for servicing vehicles that are in storage.

Experience demonstrates that under conditions when a large number of tanks and BMP's [infantry fighting vehicles] is being placed into long-term storage in open storage areas, the use of the methods, systems and materials that we have reviewed permits you to adequately ensure their storageability.

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Performance Specifications of Tank Active Defense System

93UM0234A Moscow TEKHNIKA I VOORUZHENIYE in Russian No 9-10, Sep-Oct 92 (signed to press 26 Aug 92) pp 46-47

[Unattributed article: "Tank Active Defense System"]

[Text] This system installed in a tank is already successfully neutralizing antitank weapons at our test range.

Our automatic system makes your tank invulnerable.

Main Characteristics

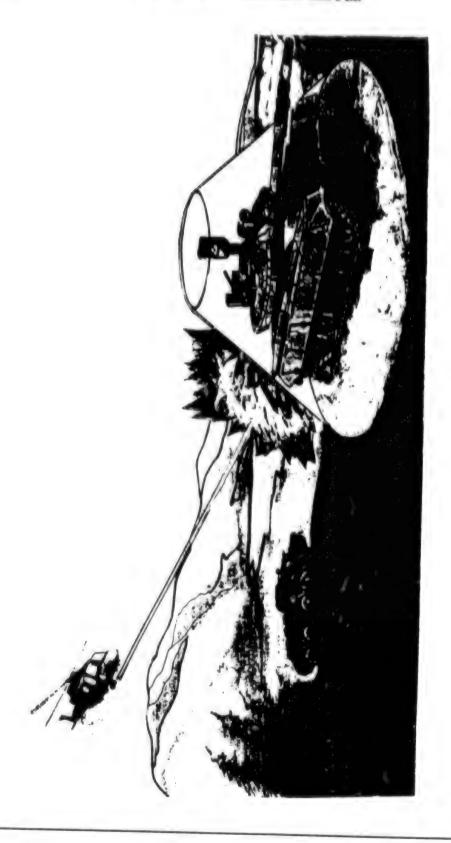
Types of targets engaged Antitank grenades and guided missiles, including heliborne (AT4, TOW, Hellfire) Radar Target detection Automatic Operating mode At least +/- 90° Defended sector in azimuth 800-1,000 kg Weight with antibullet armor Volume of electronic equipment 30 dm³ within tank Increase in tank survivability in By several times battle 0.05 seconds

Address for inquiries: Moscow, Gogolevskiy bulvar. Spetsvneshtekhnika State Foreign Economic Company for Export and Import of Armament and Military Equip-

System reaction time

Telephone: (095) 296-24-91, 202-29-07 Fax: (095) 230-23-91, 203-29-88

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CIS: AIR, AIR DEFENSE FORCES

Lt-Gen Osipenko: Social Problems of Disbanding Units

93UM0289A Moscow KRASNAYA ZVEZDA in Russian 18 Dec 92 p 2

[Interview with Air Force Cadre Training and Assignment Directorate Chief Lieutenant-General of Aviation Aleksandr Nikolayevich Osipenko by KRASNAYA ZVEZDA Correspondent Colonel Aleksandr Manushkin: "Lieutenant-General of Aviation Aleksandr Osipenko: 'We Will Have Sufficient People Who Want To And Who Are Trained To Fly"]

[Text] During recent months the stream of letters to the editorial staff has increased in which officers and warrant officers express their anxiety with regard to their future service as a result of the reform of the Russian Armed Forces and the disbanding of units that have been withdrawn from nearby and remote foreign states.

Our correspondent interviewed Air Force Cadre Training and Assignment Directorate Chief Lieutenant-General of Aviation Aleksandr Osipenko about these and other problems.

[Manushkin] Aleksandr Nikolayevich, you quite recently became the head of the Air Force Cadre Training and Assignment Directorate and you obviously immediately encountered a mass of problems. What do they consist of and what are the main tasks under these conditions?

[Osipenko] One of the most urgent cadre problems is the placement of officers who are being released during the course of authorized staff measures that are associated with the reduction of the Air Force's combat complement and with the withdrawal of units from nearby and remote foreign states. Officers, who have reached the maximum age and who have the right to a pension and who have been provided housing, are being submitted for release into the reserve (retirement). This also applies to those officers who are under the orders of the appropriate commanders and chiefs. Officers who do not have the right to pension support will be placed in vacant positions at division-sized units that are undermanned in aviation specialists.

[Manushkin] But, as the letters from officers of disbanded units attest, they are not always finding vacancies everywhere... But how will it be with those officers who do not desire to serve at a remote location?

[Osipenko] Officers for whom vacant posts are not found are being placed under orders of the appropriate commanders and chiefs with temporary duty assignments to those garrisons where there is the opportunity, albeit temporarily, to provide them with housing. But, you yourself understand, you can't endlessly keep a man under orders and a decision must be made on each officer individually. In the event of a serviceman's refusal to transfer to a new duty location, the question of his future service will be resolved individually within the framework of existing laws, orders and provisions.

But I want to be more precise: we don't have any problems with the placement of officers of rear services, communications, and radiotechnical support subunits, engineer-technical staff, and also with warrant officers.

[Manushkin] And how are things with flying personnel?

[Osipenko] Right now, we have a surplus of them, especially in fighter and fighter-bomber (ground attack) aviation. Therefore, we have been compelled to introduce additional positions for pilots, and it will be suggested to some of them that they transfer to other branches of aviation or to master the navigator speciality.

[Manushkin] But reports have appeared in the mass media, including in KRANNAYA ZVEZDA, that pilots are writing requests on release and, as a result, they say, there soon won't be anyone in the Air Force to fly. Specifically, this is a question of the Far East Military District.

[Osipenko] Actually, as of this moment, 45 pilots have submitted requests for release in the Far East. With the current surplus of pilots, this will not impact Air Force manning. We will have sufficient people who want to and who Are trained to fly.

[Manushkin] In the next two years, we need to reduce the number of officers in the Russian Army Air Force by 25% and pilots even more. Is it realistic to do that without infringing upon the rights of servicemen who have given their best years in service to the Homeland?

[Osipenko] Calculations indicate that it is realistic. I will tell you like this. The majority of officers who could be released right now are being maintained in the army not due to position or service career, but due to the last opportunity to obtain an apartment from the state. And we cannot release them based upon staff reductions because to obtain an apartment in the "civilian world" from the local authorities during the current situation and the economic situation in the country—is a hope that is more than illusory... Both the minister of defense and the Air Force commander-in-chief understand that. Therefore, it has been authorized to temporarily retain officers under orders (beyond authorized strength).

In a word, despite the fact that a significant number of officers are being freed up during the disbanding of units, we do not have a wholesale approach to release as it was at the end of the 1950's and at the beginning of the 1960's. We are approaching the decisions that have been made in a carefully thought out manner...

[Manushkin] Obviously, there is also another aspect here: experienced pilots, aren't they really not needed in the army? Are you considering that?

[Osipenko] Analysis indicates that the age of command flying cadres in the Air Force is young to a significant degree. So, up to 70% of the commanders of combat aviation regiments are 36-40 years of age, and their deputies are 2-3 years younger. Half of them have been in the posts from several months up to two years and at the present time are undergoing professional development. But in the next 1-2 years, they will be highly experienced leaders of military collectives.

Officers who have served 3-4 years in their posts will be viewed as a reserve for higher positions in the near future, and those officers who have five or more years of service at their posts will mandatorily end up in the category of those "having poor prospects" and many of them may be released into the reserve as those officers having the right to a pension in a beneficial calculation. As you see, the Air Force Cadre Training and Assignment Directorate is striving to find that middle ground that would permit both maintaining the combat readiness level of units and training the reserve and replacements...

[Manushkin] While on temporary duty assignment to Tambov, I encountered this fact: there they have enrolled more than 100 cadets at the flying school this year. And this year approximately 40 people were released into the reserve upon graduation...

[Osipenko] That number was enrolled while considering the needs for the Air Force and aviation of the other branches of the Russian Armed Forces in 1996. But unfortunately we were compelled to release personnel only because the enrollment four years ago was made based on the needs of the army of the Soviet Union...

[Manushkin] But when I was talking with the graduates, they said: they forced us to write requests for release, otherwise, they said, you will go to serve as technicians...

[Osipenko] I do not exclude that some commander didn't say something like that but in principle the question was posed like this: as a result of the fact that there is no possibility to place all of the graduates in flying positions, it will be proposed to some of them that they temporarily serve at headquarters, at command posts, as technicians, etc. But we cannot compel a flying school graduate to fill a position that is outside his specialty. Therefore, we proposed to those that refused that they be released into the reserve with the award of the rank of lieutenant and with the award of a pilotengineer diploma.

[Manushkin] Aleksandr Nikolayevich, how have aviators perceived the Law "On the Release of Officers From Active Military Service Based Upon Their Own Desire" that was adopted by the Supreme Soviet?

[Osipenko] It is perceived as the next step toward ensuring the totality of individual rights and freedoms of citizens of the Russian Federation. But I must say that this law further aggravated one cadre problem—this is the exodus of junior officers (30 years of age and younger) from the army. The Military Soviet and the Air Force commander-in-chief are concerned about the situation that has developed. Despite the work that has been conducted, we have not managed to totally localize the process of the early release of junior officers. Analysis indicates that the submission of requests resumed with the adoption of this law.

[Manushkin] Who of the junior officers are most often severing their ties with the Armed Forces? How do we stop this process?

[Osipenko] In the Air Force, this is primarily engineer-technical personnel and representatives of other shortage specialties. I think that we can stop this process only with the restoration of the prestige of military service. Steps are being taken to interest people. Recently, for example, the minister of defense issued an order on increasing the military rank by one level for officers of the engineer-technical staff who directly service aircraft. Right now we are coming out with a proposal to authorize the payment of compensation of no less than 50% of their salary to those highly skilled officers who service up to two aircraft for the work they have carried out.

[Manushkin] The profound reform of the Armed Forces and of the Air Force, in particular, is impossible without redistribution of administrative functions... Obviously, time requires us to give more authority for cadre issues to the army level and higher?

[Osipenko] It would be advisable to provide for the transfer of part of the authority from the center to local units, having expanded the rights of the Air Force commander-in-chief and army commanders, albeit on such issues as awarding military ranks and the release of officers into the reserve, during the course of reform of the Russian Armed Forces.

Specifications of SU-24MR Reconnaissance Aircraft 93UM0295A Moscow KRASNAYA ZVEZDA in Russian 29 Dec 92 p 2

[Article by KRASNAYA ZVEZDA Correspondent Aleksandr Manushkin: "The SU-24MR: Aerial Reconnaissance Aircraft"]

[Text] The SU-24MR reconnaissance aircraft was shown to the public for the first time this summer at Moscaeroshow-92. It was developed based on the SU-24M frontal aviation bomber with the variable sweep wing that has recommended itself so well in the troops. The new reconnaissance aircraft was developed as a specialized system to provide reconnaissance information to the Ground Forces and frontal aviation command authorities and, on the maritime axes, to the Navy.

"A specific feature of this aircraft," said Chief Designer Leonid Logvinov, "is the presence of various reconnaissance systems that operate jointly. The SU-24MR provides allweather comprehensive aerial reconnaissance during the day and at night at a wide range of altitudes and speeds at a depth of up to 400 kilometers behind the Forward Edge of the Battle Area [FEBA]. The aircraft is equipped with the BKR-1 onboard reconnaissance system that was developed at the Vega-M Scientific-Production Association. It consists of infrared, radar, television, laser, general radio and radiation reconnaissance systems. Furthermore, an apparatus for panoramic and oblique aerial photography has been installed on the aircraft. This also provides a high probability of detection and identification of military hardware targets, including decoys and camouflaged hardware. Control of the reconnaissance systems may be carried out both manually and automatically. The onboard navigation system supports the flight of the aircraft along a preprogrammed route, guides the

aircraft to the reconnaissance area, and low-altitude flight with the envelope of the terrain relief.

The SU-24MR does not have any equals among foreign frontal aviation reconnaissance aircraft based on the comprehensiveness of the information received. For example, the U.S. Air Force RF-4C aircraft that makes up the foundation of tactical reconnaissance aviation has not been equipped with laser or radiation reconnaissance systems, the American aircraft is lighter and has a fixed swept wing and lags behind the SU-24MR in flight range and speed at low altitudes.

The SU-24MR can attain a speed (without external fuel tanks) of up to 1,320 kilometers per hour at an altitude of 200 meters. Its combat radius while flying with reconnaissance canisters, weapons, and external fuel tanks is ρ to 700 kilometers. The ferry flight range with external fuel tanks is 2,500 kilometers. The aircraft is equipped with an aerial refueling system.

What else can you say about the SU-24MR? The collected photo information is processed directly on board and can be dropped to the ground using special devices. The remaining reconnaissance information is efficiently transmitted through radio channels.

The aircraft is equipped with two R-60 class air-to-air missiles with infrared guidance heads to combat enemy PVO [air defense] systems.

It remains to add that the SU-24MR specialized reconnaissance aircraft can be utilized for civilian purposes to assess radioactive contamination of terrain and air in areas where nuclear power plants are located, detection of forest fires, petroleum product spills on the ground and in the water, terrain mapping and so forth.

Primary Flight Technical Specifications of the SU-24MR

The Aircraft's Geometric Dimensions, in meters		
-Length With Pitot Static Tube Boom	24.53	
—Height	6.19	
-Wing Span With a Sweep Angle of 16°/69°	17.63/10.36	
Take-Off Weight, in kilograms		
—Normal	33,325	
Maximum	39,700	
Internal Fuel Tank Capacity, in liters	11,700	
Speed at High Altitude, in kilometers per hour	1,600	
Maximum Flight Speed at an Altitude of 200 Meters with 4 Canisters and 2 Missiles, in kilome- ters per hour	1,200	
Maximum Operational G-Load	6.5	

CIS: NAVAL FORCES

Description, Specifications of KA-27 Helicopter

93UM0268A Moscow KRASNAYA ZVEZDA in Russian 11 Dec 92 p 2

[Article by KRASNAYA ZVEZDA Correspondent Sergey Prokopenko: "KA-27: Heavy, Shipborne, and Multipurpose"]

[Text] The OKB [experimental design bureau] under the leadership of N.I. Kamov developed the KA-27 multipurpose shipborne helicopter in the early 1970's to increase the combat capabilities and to expand the circle of missions carried out by shipborne helicopters and also to equip the Navy's new aircraft-carrying ships with improved aircraft. The aircraft is manufactured based on the traditional Kamov coaxial design with two powerful (2,200 horse power) TVZ-117 gas turbine engines. The helicopter has a four-point landing gear and twin-fin tail unit. With a take-off weight that has been increased by approximately 1.5 times as compared to its KA-25 predecessor, it has practically the same dimensions. Furthermore, the aircraft is equipped with a folding main rotor blade system. The KA-27 is equipped with small emergency inflatable ballonets to insure a safe landing on water in emergency situations. The high power to weight ratio ensures the helicopter's employment in a wide range of heightened air temperatures and high humidity, that is, it is capable of effectively carrying out missions in all water areas of the World Ocean.

The KA-27 helicopter's primary mission, like that of its KA-25 predecessor, is search, detection and destruction of submarines. However, the range of the KA-27's capabilities has been significantly expanded. The helicopter has been equipped with radar, a computer and with modern flight and navigation instruments and radio communications and special equipment. The flight and navigation instrument suite that was specially developed for this aircraft ensures a high level of flight automation that permits carrying out combat missions during the day and at night, under simple and complex weather conditions and at great distances from the base ship. Despite the significant take-off weight (12,000 kilograms), the KA-27 helicopter has not lost the maneuverability that is inherent to coaxial aircraft. It is simple to fly.

Flight Technical Specifications for the KA-27 Helicopter

3
TVZ-117
2 X2,200
270
230
800
4.5
4,300
15.9

EQUIPMENT

Sighting, flight-navigation and radio communications equipment

WEAPONRY

Antisubmarine warfare weapons systems

An entire family of special shipborne aircraft has been developed based on the KA-27 heavy shipborne helicopter. Among them are the KA-27PS (search and rescue). This helicopter, in particular, has been adapted

for radio search and evacuation of cosmonauts and for rendering assistance to crewmembers who are victims of Naval aircraft and ship accidents. To do this, the helicopter is equipped with search and rescue equipment suites that include search surveillance radars and radio and light search systems. It also has everything necessary on board for evacuation and for rendering first aid.

The helicopter is equipped with a 300-kilogram capacity winch and a set of lifting devices that ensure the simultaneous lifting of two people on board: the rescuer and the accident victim. The helicopter can deliver inflatable rafts, boats and food to surface ship and submarine accident locations. It transports outsized cargoes externally. If necessary, the KA-27PS "marks", that is, designates an accident location with a radio beacontransponder.

Pacific Fleet SLBM Launch 'For Scientific Purposes'

93UM0262B Moscow KRASNAYA ZVEZDA in Russian 12 Dec 92 p 2

[Article by Timofey Orekhov, ITAR-TASS correspondent: "First Scientific Launch of a Ballistic Missile from a Nuclear-Powered Submarine"]

[Text] Vladivostok, 11 December. A unique launch of a live ballistic missile for scientific purposes was successfully accomplished in the Pacific Fleet. A ITAR-TASS correspondent was told this by a well-informed source at the Pacific Fleet Headquarters.

A nuclear-powered submarine of the Pacific Fleet made the historic launch at 0300 hours Moscow time on 9 December at a reference point in the Pacific Ocean not far from Kamchatka...

This launch began an experiment for producing in conditions of weightlessness an ultra-pure medical preparation of the interferon group, which promises to become a fundamental means of treating AIDS and cancers. Similar experiments were conducted earlier both in the USSR and the USA, but the effect of the relatively large weight of the spacecraft themselves was an obstacle to success.

The biophysical instrument for producing interferon was created under the supervision of chief designer Grigoriy Mayorov at one of the Russia's design bureaus. He placed the scientific and technical devices weighing about 900 kg in a reentry vehicle and installed it on an RSM-25 missile in place of the nuclear warhead. During the course of the launch, the reentry vehicle separated from the platform at an altitude of 130 km and continued to climb to an altitude of more than 1,000 km above the surface of the earth, after which it made a soft landing precisely at the designated area on Kamchatka. Its time in weightlessness was about 30 minutes. The preparation obtained in the biophysical instrument will be transferred to American scientists in accordance with an agreement reached earlier.

In experts' opinion, launching a ballistic missile for scientific purposes is an unprecedented example of conversion of the Russian defense industry.

Strategic Impact of Dividing Black Sea Fleet

93UM0293A Moscow KRASNAYA ZVEZDA in Russian 24 Dec 92 p 2

[Article by KRASNAYA ZVEZDA Correspondent Vladimir Maryukha: "On Russia's Black Sea Flank: The Balance of Forces Will Change Not in Favor of the Commonwealth Countries With the Division of the Single Fleet"]

[Text] Passions have been boiling around the Black Sea Fleet for exactly one year—since the collapse of the USSR. To put it more precisely, around the issue of to which of the former union republics and what part of the fleet they will receive. And none of the advocates of accelerated privatization has so far attempted to take a look into the near future after its division.

Moreover, the negotiating processes are occurring only between two states—Russia and Ukraine. The Dagomys and, immediately after it, Yalta agreements of 1992 have defined the understanding of the problem by the presidents of the two countries who claim the lion's share of the Black Sea Fleet: a transition period is needed. It has been defined until 1995. However, on the local level, the division of the fleet is occurring in violation of the agreements. The Ukrainian Ministry of Defense is extremely actively forming the structure of its naval forces.

The previously single Black Sea Fleet has gotten quite a bit "thinner" already this year. Moldova has obtained the fighter aircraft regiment at Markuleshty. The pilots have left but the MIG-29 aircraft have remained. Several pilots, who returned to Moldova, participated in combat operations during the aggression against the Dniester Republic in these aircraft—they bombed the populated area of Parkana on 22 June.

The "hottest spot" on the Black Sea map-Georgia—which without any negotiating process whatsoever has not only made claims on the coast guard ship brigade (Poti) that is based on its territory but has also privatized the several small surface craft and small amphibious assault vessels located there, has demanded naval forces. Ukraine has already "acquired" one combat ship—the SKR-112 that was hijacked from the Crimea to Odessa. The Slavutich Command and Control Ship (the Pridneproyve large ship that has been designated for the Northern Fleet is under construction) is undergoing state testing. Based on the statement of Ukrainian Navy Commander-in-Chief Rear Admiral Boris Kozhin (prior to this he commanded the Black Sea Fleet Crimea Naval Base), the Getman Sagaudachnyy Escort Ship is being prepared to go to sea from the plant and construction is being completed on a Zubr hovercraft. These ships, just like the Pridneprovye, were being built for the USSR's single Black Sea Fleet but Ukraine has unilaterally resubordinated them.

Furthermore, an artillery regiment, two combat applications centers, one special center for anti-sabotage forces, a range and a reserve forces base have already been transferred to the Ukrainian Navy after "retaking the oath" and resubordination to the newly created structures. Ukraine will train its own national cadres of naval specialists at the two higher naval schools in Sevastopol that they are forming into one naval institute, at an army and navy warrant officers school, and at a school for junior aircraft specialists. Issues of rear services support have already been entirely resolved by resubordinating three aircraft repair plants and by the unilateral privatization of the shipbuilding (at Nikolayev, I remind you, the aircraft carrying cruisers Varyag and Ulyanovsk are slowly dying near the outfitting quay at one of them) and boat building plants and also the construction directorate.

So, the Ukrainian program for creating its own navy is, for example, distinguished from the Georgian comprehensive approach which has envisioned not only purely military potential. Although the Georgian Navy, in the opinion of Georgian Fleet Commander Rear Admiral Aleksandr Dzhavakhishvili (he commanded a nuclear submarine, then a brigade of ships being built and repaired, and was deputy flotilla commander for weaponry and ship repair in the Pacific Ocean Fleet), totally responds to the assigned tasks. Since August 1992, ships of the Georgian maritime steamship line have been mobilized and reequipped for military needs. And if the Georgian Navy leaves something to be desired from the point of view of protection of their naval borders, it is quite suitable for moving troops and military hardware to the area of the Georgian-Abkhazian conflict.

For now, combat missions are being carried out through the efforts of civilian specialists from the steamship line. But training of navigators, missileers and artillerymen, and minelaying and communications personnel is already being conducted at Batumi Navigational School. The republic is also hoping for the return of 117 Georgian officers who are serving in the Russian Navy.

But obviously the matter will not end with the fulfillment of these momentary tasks associated with the conflict in Abkhazia. Georgia will also demand combat ships. It's entirely probable that Georgia's orientation will be on the NATO states on the issues of creating its own fleet. Moreover, the example has already been set. Our former Warsaw Treaty allies—Romania and Bulgaria—have changed the direction of their own naval ties 180°. A NATO Allied squadron has already visited the Black Sea based upon the invitation of the naval head-quarters of these two former socialist countries. In other words, a redisposition of naval forces will occur in the future on Russia's Black Sea flank.

The Navies of Romania and Bulgaria cannot by themselves claim leadership among the modern navies of the developed countries. They are also not dominant in the Black Sea Region. The Bulgarian Navy practically entirely consists of Soviet-built ships which are already gradually being removed from service in our country.

The Romanian Navy is in a somewhat better position due to a sufficiently new navy flagship of its own construction (in cooperation with the USSR) with missile weapons on board, with a large number of small ships that were purchased not only in the Union, but also in Germany and China, and also built at its own wharves. Less dependence on its former ally for deliveries of components for its ship fleet at the same time permits Romania to be more easily integrated into the North Atlantic bloc and its naval structures.

We should also not forget about Turkey, although its Navy is not distinguished by its special newness (with the exception of several frigates and missile boats that were built in 1985-1988) But it is that fleet that holds the "keys" to the Black Sea. Turkey does not even have bases on its Black Sea shores to do that. It is sufficient to blockade the Bosphorous Straits and any navy will be locked into the waters of the internal sea.

Besides the military aspect, the countries of the Black Sea Region also have to consider the economic aspect in this case. Because it is here, mainly, first of all for Ukraine and Russia, that the most suitable economic routes lie to the countries of Western Europe, to the Near and Middle East, and across the Mediterranean Sea and Atlantic Ocean—to the shores of Africa and to both Americas.

The understanding of this has compelled Russia to strengthen the Black Sea Fleet for decades but, in the final analysis, the apportionment of forces is not quite in its favor. With the division of the Black Sea Fleet, the scale is tilting even more not in favor of Russian interests. Ukraine's gain is also doubtful, although it will also increase the number of naval bases, as Boris Kozhin has stated, "from Sevastopol to Mariupol". But parity and the security of maritime borders, freedom of navigation, and favorable maritime economic ties are determined not by the number of bases and even not by the number of ships to some degree. Only a series of military measures and the economic might of the state together with a stable foreign economic orientation can support the naval interests of any independent state.

Rather, as in the case with Romania and Bulgaria, we need to talk not about Ukraine's naval orientation to the West but about its naval dependence on the West with the acquisition of naval "independence". And the fact that the Black Sea Region is already being viewed by the NATO countries as a sphere of their naval activities will not be subject to doubt.

The entry of the NATO Allied squadron into the Black Sea in November 1992 is only the "first swallow" of the manifestation of Western interests. The actual penetration of NATO's forward strategy into these waters is occurring under the aegis of the official thesis that the West must know who controls ships in the Black Sea that are capable of carrying nuclear weapons and concern about the conflict in Abkhazia.

The involvement of significant naval forces of countries of other regions into conflicts on the shores of the Black Sea must pose a threat not only to Russia's southern flank but also to Ukraine.

It is quite problematical to handle alone that which was created over the decades in this theater through the efforts of the entire Union. Each of the Black Sea Fleet units that Ukraine and Russia have obtained are actually not viable. Russia will find itself in a more serious situation because Ukraine, on whose territory the Black Sea Fleet's primary basing facilities are located, does not intend to "share" the infrastructure that has been developed with its neighbor. It has already fallen to Russia's fate to rebase the Caspian Flotilla near Astrakhan and the Poti Brigade is being evacuated to Novorossiysk. A large amount of monetary resources are needed to do that and the country's budget does not have the resources.

Of course, there are still three years ahead until the final division of the Black Sea Fleet. And hope remains for a more rational approach to the problem of the fleet and for the protection of the naval borders on the Black Sea with Ukraine's moratorium on unilateral "privatization".

CIS: REAR SERVICES, SUPPORT ISSUES

Military Space Chief Ivanov Meets with Journalists

93UM0262A Moscow KRASNAYA ZVEZDA in Russian 12 Dec 92 p 1

[Article by Yuriy Mamchur: "Military Space: Meeting with the Press"]

[Text] "Priority development of space systems ensuring effective support to operations by troops and naval forces, attack warning, and deterrence against aggression in space and from space is consistent with the Russia's national security interests and maintaining strategic stability in the world," stated Colonel-General Vladimir Ivanov, commander of the Military Space Forces, at a meeting with military journalists.

Representatives of the press were briefed on the work and missions of Golitsyno-2 subunits—the Main Center for Testing and Control of Space Assets. An interesting conversation took place with command personnel of space launch facilities and ground space command, control, and telemetry complexes. The conversation focused on the present and future of military space and the urgent problems of the many-thousand-strong military collective, which until recently was totally classified. Meanwhile, the vast majority of our space projects, including those with a national economic purpose, are

rotating around the earth and functioning normally thanks to the high professionalism, selflessness, and sometimes heroic labor of people with the emblem of the Military Space Forces on their uniform.

Interview with New Chief of Ecology Directorate

93UM0288A Moscow KRASNAYA ZVEZDA in Russian 18 Dec 92 p 1

[Interview with Russian Federation Ministry of Defense Ecology and Special Protection Systems Directorate Chief Colonel Sergey Ivanovich Grigorov by Russian Federation Ministry of Defense Press Service Associate Ivan Sas, under the rubric: "First Interview in the New Post": "Colonel Sergey Grigorov: Society Can Count on the Army During Ecological Cataclysms"]

[Text] A new structure has been created at the Russian Federation Ministry of Defense—the Ecology and Special Protection Systems Directorate. Colonel Sergey Grigorov heads it. He is 46 years old and he is a candidate of technical sciences. He was previously involved with issues of meteorological and geophysical support of the Armed Forces.

[Sas] Sergey Ivanovich, can we consider that "green" helmets along with "blue helmets" have now appeared in the Russian Armed Forces?

[Grigorov] In a definite sense, yes. This is not a service or combat arm but special structures which have been tasked with the functions of ecological support of the Russian Army and Navy.

[Sas] How do you assess the "inheritance" which has been left to you? Total neglect? Are you beginning from zero?

[Grigorov] We have reason to curse the era of stagnation. But it would be simply dishonest to make the appearance that there were no honest and responsible people prior to us who understand with which weapons and with which programs they were dealing and with what ecological consequences any incomplete treatments were fraught. It is through their efforts that much has been reduced to the level which—I say this with total responsibility—corresponds to world ecological requirements.

[Sas] Recently the perception has formed in the public consciousness that allegedly any "stirring" of the Armed Forces entails nearly ecological cataclysms...

[Grigorov] I cannot agree with that point of view. Serious scientific research indicates that the ecological damage inflicted to nature by troop activities totals only several percent of the total damage. I want to stress: these data are not from the Ministry of Defense but from environmental protection organizations that are independent of defense department.

In general, I am not an advocate of dividing environmental problems into "civilian" and "military" problems. These are nationwide problems. And even worldwide—take Chernobyl, radioactive burials in the Karsk Sea or the aftermath of weapons and military hardware tests. Incidentally, the latter is under our rapt attention. At the present time, we are working on the formation of promising scientific-research programs on the restoration of the environment that has been contaminated as a result of troop activities. Practical realization of these programs has already begun.

[Sas] As far as I know, environmental protection structures previously existed in the Armed Forces...

[Grigorov] Actually, an inspection for environmental protection was created eight years ago under the Armed Forces Rear Services and inspectors were introduced into the branches of the Armed Forces. However, their activities were reduced to just monitoring functions. Our directorate acts in the role of head organizer and coordinator of the environmental protection work on the scale of the entire Ministry of Defense.

What are its tasks? To lessen to the maximum extent possible and to exclude when possible the negative impact of troop activities on the environment. To carry out the protection of units and subunits when they have to operate under the impact of extremely unfavorable factors, as it was, by way of illustration, in the Chernobyl AES [Nuclear Power Plant] accident zone. Therefore, the directorate is also called—ecology and special protection systems. And, finally, to organize cooperation with other ecological departments and organizations. Society can count on us during ecological cataclysms.

[Sas] But do the Armed Forces have real capabilities for effective resolution of ecological problems?

[Grigorov] The army has on more than one occasion confirmed that through specific deeds. The Armed Forces has special equipment, individual protection systems, and medical systems which, without any preparation whatsoever, can be used in emergency situations. Enormous scientific potential, that is capable of carrying

out ecological tasks, not only for the army, but for society as a whole, is concentrated in military structures. Today, six doctors and more than 10 candidates of science work in the directorate alone. Among them are meteorologists, chemists, doctors, space specialists, and others. Meanwhile, the army is continuing to accumulate unique experience. Say, right now special subunits that are conducting effective work have been created and are operating in the Western Group of Forces.

[Sas] Are there ecological structures in the armies of the Western countries?

[Grigorov] Of course. In the United States, say, approximately the same directorate as ours exists in each service of the armed forces. They have a lot that is instructive. A great deal of resources are being invested in ecological programs there. For example, nearly \$237 million was spent on measures to protect the environment in Fiscal Year 1990 alone. For now, we can't allow ourselves such expenditures. But we can do a lot even with the resources that we do have.

[Sas] I have had the opportunity to hear this opinion: it would be better to remove the ecological directorate from subordination to the Ministry of Defense so that no one could pressure it.

[Grigorov] There could possibly be some logic here if we intended to carry out only supervisory functions. I repeat, we are assuming responsibility for the organization and coordination of environmental protection work in the Armed Forces. And here our structural dependence on the Russian Federation Ministry of Defense not only does not interfere, it also promotes the resolution of the primary task.

[Sas] But still, Sergey Ivanovich, you will agree that they haven't come face to face with, as they say, a "live" ecologist anywhere at Far East and Polar garrisons.

[Grigorov] I understand the rebuke. I assure you and the readers—we will not be confined to the limits of Arbat Ploshchad. On the agenda—is ecological passportization of all military facilities and regular work on location.

INTERREGIONAL MILITARY ISSUES

Notes on Weekly Activities of Russian Forces in Baltics

20-26 Nov 92

93UN0568A Tallinn THE BALTIC INDEPENDENT in English 20-26 Nov 92 p 3

[Compiled by Lya Oll]

[Text]—The Russian government has formed a commission to deal with the problems of the troop pullout from the Baltic States; the commission is chaired by Deputy Prime Minister Aleksandr Shumeiko, and includes deputy ministers of defence, finance, economics and foreign affairs.

- —Russian air force planes continued unauthorised flights in Lithuanian airspace: four flights were registered on November 9, nineteen on November 10, five on November 11, eight on November 12, fifteen on November 13.
- —Commanders of unit 110075 of the Russian air forces' 119th paratroop regiment in Marijampole, southwestern Lithuania, denied entry to Lithuanian officials who were acting on allegations that the unit's property was being sold illegally (November 4). After a visit to the site by President Landsbergis on November 14, the commanders agreed to stop the sale of property, which they said was done to provide for the military in their new postings; the unit is scheduled to leave Lithuania by the end of the year.
- —The Latvian Foreign Ministry sent a protest note to its Russian counterpart over the continued violation of the integrity of Latvia's airspace by the Russian air forces, and the flouting of laws on troop movement on Latvian territory by Russian land forces (November 12); according to the Foreign Ministry, Russian military aircraft violated Latvian borders on 88 occasions between October 1 and November 2. Russian air forces also continue flights from the Daugavpils airfield although they have no licence to use it.
- -Russian air force planes violated Latvian airspace 19 times between November 9 and 16.
- —The Russian navy will leave Estonia by the summer of 1993, chief of the Tallinn garrison, Vice-Admiral Yuri Belov, said on November 12; the navy owes more than one million kroons to Estonia for water, energy, food and transport, he said, adding that the Estonian officials have threatened to cut the supplies if payments are further delayed.
- —The headquarters of Russian navy unit 69241 in Tallinn was burgled; a hunting gun and 20 army knives were stolen from a safe (November 13); the commander of the unit suspects seamen and officers of his own unit of the burglary.

4-10 Dec 92

93UN0568B Tallinn THE BALTIC INDEPENDENT in English 4-10 Dec 92 p 3

[Text]—Russia has told Estonia that it will allow international bodies to help dismantle the military nuclear reactors in the submarine base of Paldiski. Foreign Minister Trivimi Velliste said he had received the assurances from Russia's Ambassador to Estonia, Aleksander Trofimov.

Mr Velliste said the Russians were leaving quickly, but that dealing with the nuclear installations was a problem solvable only with outside help. The site, unique in the former Soviet Union, is under direct control of the Russian Defence Ministry. Estonian green groups say the whole Paldiski area is heavily polluted and the damage can be properly estimated only after the Russian military have left.

- —The UN General Assembly approved a resolution, introduced by Latvian Prime Minister Ivars Godmanis, to help achieve a speedy and complete withdrawal of Russian troops from Estonia, Latvia and Lithuania (November 25).
- -Russian air force planes continued unauthorised flights in Lithuanian airspace: thirteen flights were registered on November 21, four on November 22, twenty on November 23, fifteen on November 24, five on November 25, four on November 26, eight on November 27, eleven on November 28, and four on November 29.
- —Seven Russian army soldiers travelling without permits from Kaliningrad to Kazlu Ruda were detained and disarmed by police on the Kaliningrad-Vilnius train (November 24); after the commander of the unit obtained the necessary travel documents from the Lithuanian Defence Ministry the soldiers were released and allowed to continue the trip.
- —Lithuanian police are investigating claims by local residents that Russian soldiers of the 107th motorised rifle division in Vilnius are giving away ammunition to youngsters (November 29).
- —The Kuldiga regional council in Latvia has decided to stop supplying electricity to the Skrunda ballistic missile early warning station Russia wants to maintain indefinitely; the station has become an item of contention in troop withdrawal negotiations between Latvia and Russia (November 24).
- —Russian air force planes continued violations of Latvian airspace: five unauthorised flights were registered on November 24 and one on November 26.
- —Russian army units stationed in Latvia owe the local authorities some 83 million roubles for electricity since February 1992; the army also owes large sums for land taxes that it has not been paying to Latvia (November 25).

- —Latvian police detained a Russian army soldier of unit 01323 in Dobele who left the barracks without permission at night and stole a civilian car, money and other items from the car (December 1).
- —Russian border guards chasing smugglers crossed 60 metres into Estonian territory and fired 2 to 3 warning shots; the Estonian border guards stopped them and escorted [them] back to the border (November 25); the Estonian guards did not catch the smugglers but later discovered 70 bottles of spirits the fugitives had dropped.

18-24 Dec 92

93UN0568C Tallinn THE BALTIC INDEPENDENT in English 18-24 Dec 92 p 3

[Text]

- —Russian air force planes continued unauthorised flights in Lithuanian airspace: four flights were registered on December 7; ten on December 8; three on December 9; 13 on December 10; two on December 13.
- —A Russian army officer travelling without the necessary documents was detained on a train in Kaunas and handed over to Lithuanian military officials (December 12).
- —In November, the Russian army withdrew a total of 974 units of equipment from Lithuania and army unit 30139 of the 906th maintenance battalion from Siauliai; the bombing range in Pabrade, a KGB hospital in Kaunas, an officers' club in Siauliai, and premises of unit 25006 have been officially handed over to Lithuanian authorities.
- —Russian air force planes continued violations of Latvian airspace: two unsanctioned flights were registered on December 7; six on December 8, and three on December 9.
- —Latvian border guards denied entry to a Russian army train carrying 39 fully armed T-72 tanks and two armoured vehicles at the border town of Valka (December 8); the train was headed from Estonia to the Russian enclave of Kaliningrad and lacked transit documents to pass through the territories of Latvia and Lithuania. The Estonian Defence Ministry had failed to inform its Latvian counterpart of the train's movement although it had been agreed on after a similar incident in October.
- The Russian air force will leave Tartu airbase in southern Estonia by December 25, according to military officials; only a small group of technician small be left behind to maintain the runways. Estonian officials have taken over 14 buildings on the base, most of which will be put to civilian use, as will the airfield itself.
- —The Russian army's 6t chemical defence brigade left Parnu, a resort town in western Estonia (December 11); this was the last Russian 2unit to leave the town and Parnu county, making the region free of all foreign troops.

Latvia Unwilling to Accept Facilities Prepared for Turnover

93UM0265A Moscow KRASNAYA ZVEZDA in Russian 10 Dec 92 p 2

[Unattributed report: "Military Installations of the Russian Army Ready for Turnover But There Is No One to Receive Them."]

[Text] Two months ago facilities of the Baltic Fleet were prepared for turnover to the Latvian side. These included warehouses at Inchukalns, a technical maintenance post and chemical shop at Riga, the premises of a fire department in Bolderay, and a Pioneer camp at Mangal, correspondent Valeriy Gromak reports to the editors.

The chairman of the office for organization of troop withdrawals I. Umpalis has stated at all levels that the Baltic Fleet is not turning over the facilities, but he doesn't lift a finger to receive them. And therefore Russian service members have been compelled to guard them for two months now against looting.

Georgian SAM Said To Down Russian Mi-8

Russian Ministry of Defense Statement

93UM0249A Moscow KRASNAYA ZVEZDA in Russian 16 Dec 92 p 1

[Russian Ministry of Defense Statement]

[Text] A Russian Armed Forces helicopter delivering humanitarian aid was shot down by a Georgian surface-to-air missile at 1640 hours on 14 December 1992 in the vicinity of Tkvarcheli. In addition to the crew, there were about 30 women and children aboard the helicopter returning from Tkvarcheli. They were being evacuated to Gudauta. The helicopter burst into flames and exploded when it hit the mountain slope.

The Ministry of Defense of the Russian Federation is lodging a strong protest against the Georgian side over this brutal action, which resulted in the deaths of totally innocent people, and offers deep condolences to the families of those who died.

Russian Ministry of Foreign Affairs Statement

93UM0249B Moscow KRASNAYA ZVEZDA in Russian 16 Dec 92 p 1

[Statement by Representative of the Russian Ministry of Foreign Affairs]

[Text] A representative of the Russian Ministry of Foreign Affairs issued a statement concerning the downed Russian helicopter. In particular, it stated that the Ministry of Foreign Affairs of the Russian Federation cannot help but categorize this action against an unarmed transport helicopter, which resulted in the deaths of women and children, as a flagrant provocation, the consequences of which cannot help but affect the state of Russian-Georgian relations.

The Ministry of Foreign Affairs of the Russian Federation, in lodging a protest against the Georgian side, demands an immediate and thorough investigation of incident and appropriate punishment of those responsible.

Incident Detailed

93UM0249C Moscow KRASNAYA ZVEZDA in Russian 16 Dec 92 p.1

[Article by Vitaliy Strugovets: "Helicopter Downed by Missile from the Ground"]

[Text] According to a report from the press center of the Transcaucasus Military District and command authorities of army aviation of the Ground Forces of the Russian Army, on 14 December two Mi-8 helicopters belonging to the district's army corps were delivering humanitarian aid to Tkvarcheli under the escort of a Su-25 ground-attack aircraft. On the return trip, the helicopters were to evacuate families of the city's Russian-speaking population.

The helicopters took off at 1627 hours. Twelve minutes later, at an altitude of 1900 meters, flying as the wingman, the helicopter with tail number "03" was hit with a surface-to-air missile. According to information received at the army aviation command post, fire warning signals for the right and left engines and the reduction gearing activated almost simultaneously. According to reports from pilots of other crews, flames quickly engulfed the entire helicopter. The first explosion also occurred in the air. The helicopter fell to a mountain slope (elevation of 600 meters above sea level) approximately 25 km northwest of Tkvarcheli in an area controlled by Georgian armed formations.

The helicopter was flown by the following crew: commander—pilot first class Captain Sergey Yevdokimov; navigator-pilot third class Senior Lieutenant Valeriy Mashkin; and flight mechanic Senior Lieutenant Sergey Illyukhin. The number of passengers on the helicopter has not yet been precisely established. According to data of the Aviation Directorate of the Ground Forces, there were about 40. The press service of Abkhazia's envoy in Russia cites a different figure of 52 people. One this is perfectly clear—the majority of those on the helicopter were children.

Army and civilian rescue teams departed Tkvarcheli and Kutaisi to search for the helicopter. According to unverified information, Russian airborne assault troops have already landed in the vicinity of the tragedy. Commissions departed Moscow and Tbilisi by air to investigate the crash on site. So far there has been no concrete information about the discovery of the crash site.

UKRAINE

Misuse of Officers' Union Funds Alleged by Member 93UM0296A Kiev PRAVDA UKRAINY in Russian 21 Dec 92 p 3

[Article by Ukrainian Officers Union Member Vitally Chechilo: "Financial Leapfrog: Ukrainian Officers Union Funds Are Being Spent in an Controlled Manner"]

[Text] Society at large knows Colonel Grigoriy Omelchenko well based on his statements in the press where he fulminates against "the Mafia in uniform". These newspaper articles have created the image for him of an uncompromising, fearless fighter against the corrupt nomenklatura. Grigoriy Yemelyanovich was elected chairman of the Ukrainian Officers Union [SOU] largely thanks to that aura.

Either due to professional habit or desiring to extract the maximum benefit from the successfully found model for himself of a "people's defender", G. Omelchenko continues to flabbergast with keen criminal cases from army reality. Moreover, following right after their own chairman, other SOU leading figures have concentrated their efforts on the search for and exposure of "enemies of Ukraine". And since there are practically no military units left in the Armed Forces where SOU members have not discovered "Mafia structures". I would like to suggest a new direction of the searches. Why not direct its attention at the activities of the Ukrainian Officers Union's central organs: first of all, you don't need to go far to find Mafia members and, second, here there are quite a few violations of the most diverse nature which are capable of satisfying the most refined taste of a militia gourmet.

I will point out that ispolkom member proposals to listen to the leadership's a plenums. And recently a team of officers headed by a serve Colonel Anatoliy Koshel conducted an inspection of the SOU Secretariat's financial management activities. The organization's leaders have preferred to not widely disseminate its results. There are extremely serious reasons to do that.

It is remarkable that the accounting of the income and expenditure of monetary resources would be absolutely overlooked in what seems to be such a solid organization as the Ukrainian Officers Union. Many associates don't have an understanding of financial discipline. There are more than enough examples of that

The sale of SOU members badges has become a real gold mine. They initially ordered 100,000 badges. But the plant still continues to stamp them out to this day since no one has considered it necessary to cancel the order. Currently, more badges have been manufactured than there are officers not only in the SOU but also in the entire Ukrainian Armed Forces. And this is hardly being

done on a philanthropic basis. The plant is presenting bills for a quite significant sum of money. The officers union already owed it 257,000 rubles. In order to somehow cover that debt, SOU sent R200,000 for that purpose that had been sent to it by Ivano-Frankovskiy Housing Construction Organization for the direct purpose of building housing for servicemen.

It would seem that you could find a solution in the profitable sale of these badges. But there is also a serious miscalculation here—there is an R80,000 shortage. No one can precisely answer—how many and at what price were the badges sold? And the main thing—where is the money that was earned from the sales.

One more fact. SOU Acting First Deputy Chairman Captain Aleksey Milenin, having violated the organization's charter, concluded a labor contract with Pan A. Rusachenko for the publication of 2,000 copies of the brochure "Na puti k natsionalnoy armii" [On the Path to a National Army], having allocated R50,000 to do that. But the Kiev Higher Military Communications Engineering School print plant printed the book for free. Nevertheless, the money was withdrawn from SOU's account and its further fate cannot be traced in financial documents.

Incidentally, for some reason Organization Chairman G. Omelchenko has a strange attitude toward financial documents. People fill them out and sign them who are not authorized to do that. And therefore they don't assume any material liability. So, Board Members A. Milenin and V. Chalyy, without hesitation, placed their signatures on documents of strict financial accountability. V. Chalyy, without the Board's consent, authorized a temporary duty trip for himself and carried out trips to the Transcaucasus at the organization's expense. In a word, the intent interest of Armenian counterintelligence in the person of V. Chalyy was the result of these trips.

The activities of SOU Deputy Chairman Aleksey Milenin merit a special conversation. The SOU Charter does not provide for the creation of any other structures whatsoever within its framework. It is for this reason that the overwhelming majority of the Board and Plenum members voted against the creation of the "Sokol" [Falcon] Youth Organization within the SOU. However, G. Omelchenko considered it necessary to ignore many of his comrades-in-arms, having permitted A. Milenin to grossly violate the charter.

To register any social organization, it must have no less than 300 members in more than half of all oblasts. But A. Milenin, having only eight people in "Sokol's" ranks, skillfully utilized the juridical "cover" of the SOU to register his mythical organization that represents no one. This formal organization was needed only in order to have the right to enter the Ukrainian National Committee of Youth Organizations and to head it.

While creating his "Sokol", A. Milenin, taking advantage of G. Omelchenko's full support, had the voluntary

dues of SOU members at his disposal without restrictions. While authorizing temporary duty assignments for himself and for his friends, even those who are not Officers Union members, he spent R14,643 in a short period of time.

A. Milenin also assumed the right to conclude labor agreements, having placed his signature on financial documents. By way of illustration, he paid R5,000 for the development of "Sokol's" charter. He paid another R3,000 for the registration of this organization. Thus, "Sokol" was created at the expense of the voluntary dues of SOU members.

That is the results of the good nature and the absence of control of the Ukrainian Officers Union's leaders—there is a shortage of R500,000.

Maybe that sum will appear to be inconsequential to some people based on today's prices. But SOU has never "managed" millions while covering its own enormous expenditures through donations and voluntary dues. It's no secret that we have often had to pass the hat

However, recently officials of the Ukrainian Officers Union Secretariat have begun relating to our financial resources with amazing ease and without a sense of obligation. All of this very much reminds me of the small cooperative, where each person quietly manages his own small deals, not even finding time to observe even the appearance of propriety. And if these "cooperative" trends gain momentum in the future, while winning out over common sense and elementary decency, the Ukrainian Officers Union will be transformed soon enough into a narrow network of people who are only concerned with satisfying their own burning ambitions.

BALTIC STATES

Estonian Army To Use NATO Armaments

93UN0571A Tallinn THE BALTIC INDEPENDENT in English 18-24 Dec 92 p 3

[Text] The Estonian army is going to buy all its arms from the West and "switch over to NATO armaments." Estonia's new defence minister. Hain Rebas. said on December 13. Concrete offers of arms sales have been made to the Defence Ministry by Germany and France, he said.

"The threat to Estonia comes from the East ... and if we must confront danger from the East with arms obtained from the East we would soon face problems of getting ammunition," the acting chief-of-staff of the Estonian defence forces, Colonel Anst Laaneots, explained.

On December 11, Estonian defence forces received 2,000 army uniforms donated from Sweden. Previously, Finland had donated 2,000 rifles and three machine guns for practice and training purposes. As to combat arms, the army only has the Soviet-designed sub-machine guns bought a few months ago from Bulgaria.

Sweden and Finland have agreed to train 20 Estonian noncommissioned officers each in 1993. Two Estonian officers are currently studying in the USA and 20 noncommissioned officers are being trained in Finland.

Mr Rebas, an expatriate Estonian from Sweden, plans to set up a "total defence" for Estonia which would comprise both military and civil defence systems. He said such a defence doctrine would be modelled on Sweden and Finland where it works very well.

CAUCASIAN STATES

Increasing Use of Air Power in Caucasus

93UM0247C Moscow KRASNAYA ZVEZDA in Russian 12 Dec 92 p 3

[Article by Sergey Prokopenko, KRASNAYA ZVEZDA correspondent: "It Is Getting Crowded in the Skies of the Transcaucasus...: Combat Aviation in 'Hot Spots' of the Former USSR"]

[Text] It is not just hunting rifles that are being used today in Abkhazia and Karabakh. Automatic weapons, artillery, armored equipment, and multiple rocket launchers have come into use. Now aviation is also appearing more and more often in the areas of the conflicts. Several dozen combat helicopters and airplanes are bombing and strafing once peaceful cities and villages.

In the estimate of experts, combat aviation is being used most actively in the Armenian-Azerbaijani conflict, and the chances of the Azerbaijani Air Force look more preferable. Just what does the aviation of Azerbaijan make of itself today?

In order to answer this question, let us go back to the events of almost a year ago. In early February of this year. Azerbaijani armed formations at Sangachaly sealed off a separate helicopter squadron. All the combat equipment and gear was declared nationalized. Experts calculate that the Azerbaijani side received about 20 Mi-24 and Mi-8 helicopters as a result of this action.

It should be noted that the equipment Azerbaijan got was quite formidable. The Mi-24 helicopter gunship was rightfully considered the most effective helicopter in the world until the late 1970s. It can carry up to four Shturm guided missiles. Depending on the modification, it is equipped with a pod of 12.7-mm four-barrelled rotating machineguns or a 23-mm cannon. Four mounted pods carry 132 air-launched rockets. As a variant, it is possible to mount pods with 80-mm rockets and two or four 500-kg aerial bombs. The range of missions that can be carried out is also fairly broad: destroying armored targets, ground-attack actions against fire positions and strongpoints, escorting assault-transport helicopters, air-to-air combat, artillery fire adjustment, and reconnaissance.

When skillfully used, Mi-8 assault-transport helicopters also pose considerable danger to ground troops. Already in the second half of February, the first reports were received about combat employment of these helicopters against weapon emplacements at Armenian combat positions in the village of Karadagly and during an offensive undertook by Azerbaijan in the direction of Khodzhaly-Stepanakert (Khankendi).

But these are helicopters. And two months after the events at Sangachaly, on 8 April of this year, a Su-25 ground-attack aircraft was hijacked from an air regiment based near the settlement of Sital-Chay by Senior Lieutenant Kurbanov. Despite claims by the Air Force commander in chief's office that steps have been taken making it possible to preclude the combat employment of the aircraft, this ground-attack aircraft has repeatedly taken part in combat operations, that is, until it was shot down during one of the raids. It is assumed that Senior Lieutenant Kurbanov, the only pilot in the Azerbaijani Air Force at that time trained to fly this type of aircraft. perished. Nevertheless, reports from the area of combat operations persistently continued to mention the allegedly reported use of Su-25 ground-attack aircraft by the Azerbaijani side.

Today, it can be asserted with a fairly high degree of reliability that Azerbaijan no longer has any aircraft of this type. It is another matter that the Azerbaijani Air Force has at its disposal about 70 L-29 aircraft. The contours of this aircraft resemble those of the Su-25. In experts' opinion, it is the regular appearance of these aircraft in the skies over Karabakh that has maintained the myth that Azerbaijan has ground-attack aircraft. The L-29 itself is a Czech trainer aircraft used for initial flight training of pilots. But it is possible to install pods of unguided air-launched rockets or hang bombs on it, which is quite sufficient for combat employment of these aircraft.

It should be noted that the opposing sides have used every conceivable and inconceivable method in attempts to create their own air forces and man them with pilots. Still, the majority of the aviation units have nearly avoided losses of aviation equipment, including in Azerbaijan. The reconnaissance regiment stationed at Dallyar has been "unluckier" than others.

On 9 June, by order of command authorities, only eight MIG-25 aircraft were able to take off. After this, about 800 armed Azerbaijanis led by Rakhim Gaziyev, the republic's minister of defense, penetrated to the airfield. They damaged tires and laid slabs in front of the aircraft to prevent them from taking off. That same night, an Il-76 transport aircraft that had arrived to evacuate families of servicemen was hijacked from the airfield.

Thus, another 16 Su-24 and MIG-25 reconnaissance aircraft were captured by the Azerbaijani side. But, in experts' opinion, using these aircraft in the zone of the conflict is fairly problematical. Thus, the MIG-25RB reconnaissance bomber, intended for conducting high-altitude visual and radar reconnaissance and for making bomb strikes against fixed targets, can carry up to 4000

ks, of 500-kg bombs. Automatic release of bombs according to set coordinates is done with the aid of the Peleng bombing system. However, according to information received, the special equipment that makes it possible to carry out such tasks was destroyed before the airfield was seized. Still, according to a number of reports, the Azerbaijani side has made attempts at combat employment of the MIG-25 aircraft. Several of the aircraft have crashed as a result of incompetent tactical use.

According to other information, Azerbaijan also has several MIG-21 aircraft, but we have not yet been able to verify this information. Whatever the case may be, today the Azerbaijani side has at its disposal the most powerful aircraft and helicopter fleet among other independent states. Therefore, operations by its aviation are also becoming more regular in nature.

What is the Armenian side using to oppose the Azerbajiani Air Force? As far as we know, for the time being Armenia has only a squadron of helicopters, previously belonging to Russia and based at Yerevan. The squadron includes Mi-24 and Mi-8 helicopters. However, right up until the end of August there had been no information on the use of these helicopters in combat operations. Apparently, this was due to a critical shortage of trained flight personnel. To date, the republic has managed to gather about 30 men from among pilots earlier taken off the roles or discharged from the armed forces and pilots of the former DOSAAF. During the summer they worked on restoring their flying skills, and only in early September did the Armenian side begin demonstrating a certain amount of activeness in the air, making rare retaliatory strikes against Azerbaijani positions. But, judging from press reports, they suffered losses in the very first sorties. It seems that in connection with this, the activities of Armenian aviation for the time being are being limited to performing reconnaissance, transport movements, and, in rare cases, making strikes against discovered targets.

Nevertheless, it must be said that the use of aviation is increasingly "coming into style" in resolving existing conflicts. I believe we will long remember the instances of Moldova's use of MIG-29 aircraft in the Dniester region—the tragic bombing of Parkay. This also has not passed Abkhazia, where confrontation is at its height. Thus, already in September of this year, a Georgian helicopter on the approach to Sochi attacked the passenger ship Kometa. As a result, one passenger died, and 11 were injured. Incidentally, this is not the first time the Georgian side has used aviation. Back during the combat operations in South Osetia, a Georgian helicopter strafed Osetian villages around Tskhinvali. It was later destroyed. But, as they say, a lot of water has flown under the bridge since then. Today Georgia has at its disposal a composite helicopter regiment which is based on the outskirts of Tbilisi at Novo-Alekseyevka. According to my data, in accordance with the agreements concluded in Tashkent, Russia is transferring to Georgia about 100 aircraft and not more than 50 helicopters. The number

of aircraft already transferred is close to the stipulated level. From all appearances, these aircraft will comprise the basis of the Georgian Air Force. We also should not forget about the Tbilisi Aircraft Plant, which earlier produced up to 20 Su-25 ground-attack aircraft a year. Observers do not rule out the appearance of these aircraft soon in the zone of the Georgian-Abkhazian conflict. It is also known that Georgia has at its disposal 30 trained pilots who can perform combat missions.

By the way, the other day the TV program Vesti reported that Abkhazian authorities have also confirmed that they have combat aircraft. If this is indeed so, it should be expected that the conflict on the Black Sea coast will be given a new impetus.

So, the use of aviation in conflicts on the territory of the former USSR is an immutable fact that we have to deal with. As far as the prospect of using combat aircraft and helicopters is concerned, the opinion of experts on this account is such: It is unlikely that bombing and strafing from the air will be decisive in nature in the future. What is more, it is expected that the activeness of the sides will decrease, primarily because neither of the sovereign republics in the conflict has suitable repair facilities, and many of the "privatized" aircraft and helicopters have nearly or already used up their service life. The enterprises capable of performing the full amount of work necessary are, for the most part, located on Russian territory. Of course, the possibility of purchasing aircraft in overseas countries is not ruled out. But it is not enough to buy an aircraft; an entire maintenance complex is needed. In addition, it is necessary to train pilots and maintenance specialists. And it is very doubtful that in the present economic situation states with collapsed economies will be able to to this.

One of the obstacles to the escalation of air warfare (which I underscore again) is the virtually complete lack of trained pilots in the national air forces. This problem is equally topical for Azerbaijan, as well as for Armenia, Georgia, Abkhazia, and Moldova. None of the republics has the capabilities to set up a system for training flight personnel on their own facilities. And mercenaries are just that—mercenaries. The problems cannot be resolved just by their involvement.

However, the calculations of specialists and the opinions of experts are little consolation for those who have found themselves under the bombing. In addition, no matter how comforting the conclusions may be of those who know aviation well, it must be said not without concern that combat aircraft and helicopters are by far not the best or the most weighty argument. Logic of life suggests that the use of any weapon, even such a powerful one as aviation, has never led to resolution of a conflict. Escalation of military operations is only a dead-end path.

Georgian Seizure of Russian SAM Loader, Missiles 93UM0247B Moscow KRASNAYA ZVEZDA in Russian 16 Dec 92 p 2

[Article by Petr Karapetyan and Aleksandr Ivanov, KRASNAYA ZVEZDA correspondents: "Missiles of a Russian Air Defense Unit Seized"]

[Text] On 9 December, Georgian guardsmen seized loader/transporter vehicles with six missiles, a prime mover, and a vehicle-mounted crane of a Russian surface-to-air missile [SAM] subunit near Tbilisi. The Georgian Ministry of Defense reported that the equipment and missiles will not be returned. At the same time, Georgian armed units are proposing to commanders of Russian SAM units to restore the air defense system in Abkhazia and to train subunits for firing against both air and ground targets. This information was received by our correspondents Petr Karapetyan and Aleksandr Ivanov.

Results of Georgian-Abkhazian Negotiations

93UM0247A Moscow KRASNAYA ZVEZDA in Russian 16 Dec 92 p 1

[Article by Anatoliy Stasovskiy: "Abkhazia: Cease-Fire Agreements in Question for Time Being"]

[Text] Negotiations between the Georgian and Abkhazian sides, which, as we know, began on 9 December, ended on 15 December in Gudauta (Abkhazia). The question of cessation of combat operations and withdrawal of Georgian troops from the territory of Abkhazia was discussed. During the negotiations, as was reported to the editorial staff from the press service of Abkhazia's envoy in the Russian Federation, an agreement was reached on five of the most important points. Firstcessation of all combat operations on the territory of Abkhazia from the Psou River to the Ingur River. Second—withdrawal of heavy equipment of the Georgian Army from the Gumistinskiy Front to the vicinity of Bagmarana, and from the area of guerrilla operations to the city of Ochamchira. Third-Abkhazian heavy equipment will be withdrawn from the Gumistinskiy Front to the vicinity of Novyy Afon, and from the zone of guerrilla operations to the city of Tkvarcheli. Fourth-relocation of equipment is to be completed before 18 December. Fifth-after relocation of the equipment, the Georgian side is to begin withdrawal of troops from Abkhazia.

We also contacted the press center of the Georgian parliament in Tbilisi. They confirmed that the negotiations had concluded and reported that the Abkhazian side primarily was insisting on replacing the Georgian troops in Abkhazia with Russian troops, who, in the opinion of the Abkhazian leadership, are to perform a peacemaking mission. But, the associate of the press center of the Georgian parliament claims, no one will go for this.

In general, one gets the impression that the agreements in Gudauta between the Georgian and Abkhazian delegates have already been placed in question today. In any event, addressing a session of the Georgian parliament on 15 December, Eduard Shevardnadze stated that Georgia will not go for introducing Russian troops into Abkhazia and is not planning to withdraw its troops for the time being.

Meanwhile, during the days of the negotiations, the military units of both opposing sides waited with hope for the politicians' decisions. During such a brief calm, our photo correspondent also captured on film the fighting men of one of the Abkhazian detachments.

New Offensive in Karabakh Reported

93US0268A Moscow NEZAVISIMAYA GAZETA in Russian 25 Dec 92 p 3

[Article by Aydyn Mekhtiyev: "Pre-New Year Offensive of Azerbaijani Forces: Settlement of the Karabakh Conflict Within CSCE Framework Remains Problematic"]

[Text] According to a report of the information and analysis center of the Azerbaijani Defense Ministry, the successful offensive of units of the Azerbaijani National Army begun at dawn 22 December resulted in the complete destruction of military facilities of Armenian formations on the border between Krasnoselskiy Rayon in Armenia and Kedabekskiy Rayon in Azerbaijan. The defense department report emphasizes that "Armenian forces have recently subjected the Russian-speaking villages of Novosaratovka and Novoivanovka, in Kedabekskiy Rayon, to regular shelling from the commanding heights of Krasnoselskiy Rayon. This has led to significant destruction and casualties among the peaceful population." As a result of the operation conducted by Azeri forces, about 170 enemy soldiers and officers were killed; five artillery systems were destroyed, as were several armored fighting vehicles and tanks. It was also reported that on 23 December, an Armenian reconnaissance aircraft was shot down in the skies over Kedabekskiy Rayon. The Azerbaijan Armed Forces Command reported in the local mass media that operations to destroy enemy military facilities would continue along the entire state border.

As we know, Azeri forces earlier took control of the village of Artsvashen, located in Azerbaijan's Kedabekskiy Rayon. The defense department reported also that control by Azeri forces was fully restored at the end of last week over population centers in Zangelanskiy Rayon in Azerbaijan, which had been occupied as a result of a sudden attack waged by the Armenian Army the beginning of December.

Commenting on recent events in the region, Azerbaijani Minister of Foreign Affairs Tofik Gasymov emphasized at a press conference in Baku that the Armenian side is evading a peaceful resolution of the Karabakh issue. He stated that evidence of this could specifically be seen in the fact that, on the very threshold of the Stockholm

meeting held on the level of CSCE ministers of foreign affairs, Armenian forces treacherously invaded the territory of Azerbaijan and seized 15 villages. According to him, the failure of peace negotiations conducted under the aegis of CSCE, which as we know were cut off in autumn of this year, can be explained by the fact that no success was achieved within the CSCE framework to work out a mechanism for applying sanctions against a side which would violate the obligations it had assumed.

Our NEZAVISIMAYA GAZETA correspondent asked Araz Azimov, head of the Directorate of International Organizations of the Foreign Policy Department of Azerbaijan, to comment on the statement of the Azerbaijani Minister of Foreign Affairs. "The reference," he stressed, "is to the fact that the principle of consensus, taken as the foundation of CSCE, does not allow a decision to be made on declaring Armenia an aggressor country. This is why Armenia, understanding that its actions will go unpunished, continues to seize more and more territory in Azerbaijan. Under these conditions, CSCE must look for new approaches to resolving this situation." Azimov, who took part in the Stockholm meeting on the expert level, set forth the position of the Foreign Policy Department of Azerbaijan to the representatives of the CSCE countries. This position consists of the following: the Azerbaijani side does not consider it possible to seriously participate in drawing up new documents on a settlement of the problem until such time as Armenia fulfills in their entirety the obligations it has already assumed as a CSCE member. In his words, Armenia must remove its armed formations from Nagorno-Karabakh, after which a decision might be made on the establishment of international control over the so-called Lachinskiy Corridor. In addition, Armenia must agree with the term "cessation of military activities," which Azerbaijan insists upon. This term envisages not only a cease-fire, but also a ban on any movement of forces and relocation of military units, and in this instance—rejection of the movement of personnel and equipment from Armenia to Karabakh through the Lachinskiy Corridor.

"Armenia is in fact proposing to cease fire for the winter period, with the aim of effecting the supply of large quantities of arms and equipment to Nagorno-Karabakh over this time frame—then, with the advent of spring, to secure convocation of the Minsk conference of CSCE, at which Armenia will exert powerful pressure on Azerbaijan. This path is entirely unacceptable to us," the head of the Directorate of International Organizations of the Azerbaijan Ministry of Foreign Affairs stated.

Araz Azimov assessed as absurd the accusation of acting Armenian Minister of Foreign Affairs Arman Kirakosyan directed towards Azerbaijan—that the latter had been conducting a policy of economic blockade against Armenia, an accusation he made at the Stockholm meeting. "We are not talking about a blockade, but about severed communications between warring sides during a period of active combat operations. But Kirakosyan's assertion pursues the aim of propagating disinformation to the world community," Azimov stated.

20 SU-25 Aircraft delivered from Russia to Military Airport Near Gudauty

93US0267A Moscow NEZAVISIMAYA GAZETA in Russian 29 Dec 92 pp 1, 3

[Article by Guga Lolishvili: "Parliament Dissatisfied With Defense Minister. Pilot of Downed Georgian Helicopter Decorated Posthumously"]

[Text] At the end of last week Georgian Defense Minister Tengiz Kitovani received a telegram from Moscow with the stamp of the Ministry of Defense of Russia. Speaking the next day at a meeting of the Georgian parliament, Kitovani reported that it was necessary to weigh all the "pros" and "cons" of the meeting with Grachev [Russian Defense Minister]. Nonetheless, at a conference with the head of state on that same evening, the republic leaders were in favor of holding the meeting. But, according to existing information, Kitovani has no concrete authority in the negotiations with Grachev. On 28 December, speaking on national radio, Eduard Shevardnadze announced that it was still not clear whether or not there would be a meeting in Moscow since, according to his information, Grachev might not be in Moscow at that time. "The situation requires further clarification," said Shevardnadze. In the opinion of observers, at the next meeting, along with the situation in Abkhazia, where Russian and Georgian interests have conflicted recently, they will discuss the transfer of arms according to Tashkent quotas by Russian troops in Georgia. Speaking at the next meeting of the Georgian parliament, Defense Minister Kitovani announced that, according to his information, the Abkhazians have six combat aircraft given to them by representatives of Russian troops on the territory of the autonomous republic. Kitovani said that he has information about the presence of Russian military instructors in the Abkhazian formations. The minister stated that he expected such steps from a country that was the legal heir of the state that bore the name the "evil empire."

Dissatisfaction with the Defense Minister was demonstrated at a meeting of the Georgian parliament held just before the meeting of the defense ministers. Many deputies criticized Kitovani for not having gone to the combat zone for two months. Kitovani himself explained his presence in Tbilisi by the need to accept the arms that were arriving in Georgia. Kitovani was so hurt by the reproach from the members of parliament who hinted at his "unwillingness to take a risk" that in the confusion he let drop the figure of 16 million cartridges that had arrived in Tbilisi a couple of days ago. In response to the statement of one of the deputies about irregularities in the Georgian Armed Forces Kitovani said: "Even if Marshal Zhukov himself were to rise from the grave he would not be able to introduce order into the Georgian Army all at once." In the words of the Georgian defense minister, the republic is not prepared for war and it was not likely to be prepared for it in another 10 years.

The position of Georgian Foreign Affairs Minister Aleksandr Chikvaidze, who spoke at that same session of parliament, is telling. Chikvaidze recognized the importance for Georgia of normal relations with Russia but nonetheless noted that as a state Georgia should be oriented toward Europe. Chikvaidze stated that Georgia would not raise the question of acceptance into NATO in the near future since in a meeting with him General Secretary Woerner gave him to understand that in spite of all his sympathy for Georgia he considers this premature. In Chikvaidze's opinion, this is related to an unwillingness on NATO's part to introduce more tension into relations with Russia, with which Georgia's relations have deteriorated.

Over the past weekend the situation in Abkhazia has remained tense. According to a report from the Georgian armed forces headquarters stationed in the autonomous

republic, on Saturday and Sunday, as a result of harder fighting Georgian subdivisions had managed to move several kilometers forward and secure new positions. On Saturday a land-based missile downed a helicopter of the Georgian Air Force and both crew members died. Shevardnadze signed an edict according to which the crew commander, Colonel of Georgian Aviation Dzhemal Maysuradze, was posthumously awarded the Order of Bakhtang Gorgasal of the First Degree.

From information from unofficial sources a correspondent learned that several days ago up to 20 SU-25 aircraft were delivered from Russia to the Bombora military airport near Gudauty. This squadron was commanded by officer Shalimov. It was learned from the same source that a large group of high-ranking officers of the Russian Army had arrived at a place near Gudauty.

ARMS TRADE

Customs Committee Order on Dual-Use Chemicals Export Controls

934P0028A Moscow KOMMERSANT in Russian No 40, 2-8 Nov 92 p 17

[Russian Federation State Customs Committee Order No 465 of 15 October 1992, under rubric "Documents: Chemicals Export Control"]

[Text]

Russian Federation State Customs Committee Order No 465

15 October 1992, Moscow

On Imposing Control Over the Export of Chemicals and Technologies Which Have a Peaceful Purpose But Can Be Used in Creating Chemical Weapons

The State Customs Committee order which arrived at customs houses last week limits the export of a number of chemicals and the technologies for producing them. The order is being published in abbreviated form and the list of chemicals and technologies is being published fully.

...The statute provides a set of measures for export control of chemicals and technologies which have a peaceful purpose but can be used in creating chemical weapons (hereafter "dual-use chemicals and technologies"). The procedure for control of exports of dual-use chemicals and technologies from the Russian Federation provides for preparing and issuing an opinion on the possibility of exporting dual-use chemicals and technologies enumerated in the List, and licensing and declaring dual-use chemicals and technologies.

The statute also provides for the following:

- 1. In concluding contracts (agreements) for export of dual-use chemicals and technologies included in the List, subjects of economic activity on territory of the Russian Federation or in places (points) under the jurisdiction or control of the Russian Federation regardless of forms of ownership point out on a mandatory basis the requirement that the importer will not use these chemicals and technologies to produce chemical weapons, will not reexport them or transfer them to anyone whomsoever without permission for this in writing from the exporter, coordinated on a mandatory basis with the Russian Federation Government Export Control Commission.
- 2. Dual-use chemicals and technologies included in the List cannot be exported from the Russian Federation or be reexported to a state which violates the ban on use of chemical weapons...
- 4. Dual-use chemicals and technologies included in the List are exported only under one-time licenses issued by the Russian Federation Ministry of Foreign Economic Relations.
- 5. The basis for issuing licenses is an opinion of the Russian Federation Export Control Commission of the Russian Federation Government on the possibility of exporting dual-use chemicals and technologies.

To obtain an opinion, an application for issue of a license, made out in accordance with requirements established by the Russian Federation Ministry of Foreign Economic Relations, is sent to the Russian Federation Ministry of Economy Export Control Department (103009, Moscow, Okhotnyy ryad, 1), which is a working body of the Russian Federation Export Control Commission of the Russian Federation Government. Copies of the contract and document providing the importer's guarantees of nonuse of the object of export in producing chemical weapons are appended to the application...

Annex to Russian State Customs Committee Order No 465 of 15 October 1992

List of Chemicals and Technologies Which Have a Peaceful Purpose But Can Be Used in Creating Chemical Weapons, and Which are Exported Under License

Section 1. Chemicals*

Position No.	Chemicals	Foreign Economic Activity Commodity Nomenclature Code
1.1.	Compounds having one P-methyl, P-ethyl or P-propyl (normal or iso) bond	293100100,293100200,293100300,293100900
1.2.	N, N-diisopropylaminoethyl-2-chloride	292119900
1.3.	N, N-diisopropylaminoethane-2-thiol	293090800
1.4.	N, N-diisopropylaminoethane-2-ol	292219000
1.5.	Diethyl-N, N-dimethylamidophosphates	292119900
1.6.	Pinacolyl alcohol	290519900
1.7.	3-hydroxy-1-methylpiperidine	293339900
1.8.	Quinuclidine-3-ol	293339900
1.9.	Thiodiglycol	293090800
1.10.	Arsenic trichloride	281210900
1.11.	Cyanogen chloride	285100900

List of Chemicals and Technologies Which Have a Peaceful Purpose But Can Be Used in Creating Chemical Weapons, and Which are Exported Under License (Continued)

Section 1. Chemicals*

Position No.	Chemicais	Foreign Economic Activity Commodity Nomenclature Code
1.12.	Carbonic acid dichloranhydride	281210900
1.13.	Hydrogen cyanide	281119000
1.14.	Trichlornitromethane (chloropicrin)	290490900
1.15.	Dimethylphosphite	292090200
1.16.	Trimethylphosphite	292090300
1.17.	Diethylphosphite	292090800
1.18.	Triethylphosphite	292090800
1.19.	Dimethylamine hydrochloride	292111900
1.20.	Phosphorus trichoride	281210150
1.21.	Phosphorus pentachloride	281210190
1.22.	Phosphorus oxychloride	281210110
1.23.	Hydrogen fluoride and its salts	281111000,282611000,282619000
1.24.	Benzilic acid	291819900
1.25.	3-Quinuclidone	293339900
1.26.	Dimethylamine	292111110-292111190
1.27.	Thionylchloride	281210900
1.28.	Methylbenzylate	291819900
1.29.	Chloroethanol	290550100
1.30.	Pinacolin	291419000
1.31.	Potassium cyanide	283719000
1.32.	Sulphur monochloride	281210900
1.33.	Sulphur dichloride	281210900
1.34.	Dimethylaminhydrochloride	292111900
1.35.	Sodium cyanide	283711000
1.36.	Triethanolamine	292213000
1.37.	Phosphorus pentasulfide	281390100
1.38.	Diisopropylamine	292119900
1.39.	Diethylaminoethanol	292219000
1.40.	Sodium sulphide	283010000

*For purposes of fulfilling Russian Federation Presidential Directive No 508-rp of 16 September 1992 and Russian Federation Government Decree No 734 of 18 September 1992, commodities subject to licensing in accordance with this list are specified both by the code TN VED as well as by a textual description of the commodities.

In declaring commodities classified in commodity items of this list, it is necessary to indicate the technical characteristics specified by this list in column 31 of the GTD [not further expanded; possibly state customs document].

Section 2. Technologies

2.1.	Technology of producing compounds containing a P-methyl, P-ethyl or P-propyl (normal or iso) bond.
2.1.1.	dimethylmethylphosphonate
2.1.2.	methylphosphonyldifluoride
2.1.3.	methylphosphonyldichloride
2.1.4.	diethylethylphosphonate
2.1.5.	ethylphosphonyldichloride
2.1.6.	ethylphosphinyldichloride

Section 2. Technologies (Continued)

2.1.7.	ethylphosphonyldifluoride
2.1.8.	methylphosphinyldichloride
2.1.9.	O-ethyl-2-diisopropylaminoethylmethylphosphone
2.1.10.	diethylmethylphosphonite
2.1.11.	dimethylethylphosphonate
2.1.12.	ethylphosphinyldifluoride
2.1.13.	methylphosphinyldifluoride
2.1.14.	phosphacrylate
2.1.15.	phosdiol-A
2.1.16.	estephane-383
2.1.17.	hexarane
2.1.18.	phospoliol 2
2.1.19.	phostetrol 1
2.2.	Technology of producing N, N-diisopropylaminethyi-2-chloride
2.3.	Technology of producing N, N-diisopropylaminoethane-2-ol
2.4.	Technology of producing N, N-diisopropylaminoethane-2-thiol
2.5.	Technology of producing diethyl-N, N-dimethylamidophosphates
2.6.	Technology of producing pinacolyl alcohol
2.7.	Technology of producing thiodiglycol
2.8.	Technology of producing cyanogen chloride
2.9.	Technology of producing dimethylphosphite
2.10.	Technology of producing phosphorus trichloride
2.11.	Technology of producing phosphorus pentachloride
2.12.	Technology of producing phosphorus oxychloride

DOCTRINAL ISSUES

Larionov Ponders Russian Nuclear Strategy 934P0047A Moscow NEZAVISIMAYA GAZETA in Russian 19 Dec 92 p 2

[Article by Professor Valentin Larionov under the heading "Security": "Strategic Dilemmas of the Nuclear Age: Catastrophe Can Only Be Prevented"]

[Text] In the debate over what concept should form the basis of Russia's nuclear strategy, i.e. first strike [pervyy udar], retaliatory counterstrike [otvetnyy-vstrechnyy udar] or retaliatory strike [otvetnyy udar], thus far preference in strategic planning has been given to the retaliatory counterstrike option.

However, V. Repin, a leading technical expert, proposes that the first strike option be made the basis of our planning; this would allegedly provide tremendous advantages in terms of Russia's security and would deter nuclear war (see NEZAVISIMAYA GAZETA, 24 September 1992). Earlier, political scientist A. Arbatov published his arguments in favors of the concept of a "retaliatory strike" (NEZAVISIMAYA GAZETA, 10 March 1992).

I do not wish to assume the role of arbiter, but I do not fully share the view of either individual. I base that statement on my personal and collective experience with the development of the theoretical foundation of Soviet nuclear strategy, and on its evolution and the circumstances which dictate it.

In the late 1950's and early 1960's I was one of the authors and compilers of the book "Voyennaya strategiya" [Military Strategy], which was edited by Marshal V. Sokolovskiy. Some historians of Soviet military thinking ironically call the period when the idea of this much talked-about book was maturing and when the actual work on it was being done the "romantic" period in Soviet nuclear strategy. Indeed, in those years it seemed to us that we were finally witnessing the arrival of that long-awaited moment when the cherished dream of all preceding generations of strategists would become a reality, i.e. that with the aid of the means of force under our command we would have the ability to achieve any military or political objectives, even the most extreme ones. Strategic planning organs did not even give any thought to what form a mass Soviet missile strike would take, whether it would be a first strike or a retaliatory strike. The United States' missile gap solved every problem for us.

By the late 1960's Soviet-American nuclear parity had been established. As a result the focus shifted to the technical and combat readiness of the nuclear missile component of our armed forces. Calculations of the two sides' capabilities with regard to early warning, the length of time required to prepare for a strike, weapons systems guidance and strike results became a part of the picture.

Then world theory began acknowledging the superiority of a disarming first strike. A short while later intensive research began on the concepts of a second retaliatory counterstrike or a retaliatory strike.

I should note that emerging parity was not the only impetus behind this boom; there was also the appearance of new types of missile technology (MIRVed missiles, mobile ground launchers, and the new SLBMs.). A major role in the selection of our hypothetical model for employment of nuclear missiles was played by ideological and psychological considerations. The USSR's political leaders, attempting to appear peace-loving to world public opinion, demonstratively rejected the first strike concept. But a purely retaliatory strike did not suit them, either. That was mainly due to psychological considerations. In the people's mind a retaliatory strike could not perform its role of guaranteed retribution if the United States were able to mount a successful counterforce strike.

Thus appeared the "face-saving" formula of the "retaliatory counterstrike" and complex technical and mathematical calculations were undertaken. These were also necessary to justify for domestic consumption the USSR's position at the Soviet-American strategic arms limitation talks (SALT-1), which began in 1969.

Typically, all calculations at that time were based on the assumption that nuclear weapons would be used. Essentially it was only in the late 1980's that there was a radical change in the two sides' strategic thinking, planning and behavior. They finally acknowledged something that had long since become clear to everyone else: there would be no winners in a nuclear war, and such a war must be prevented at all costs. This was set forth in an official statement resulting from the meeting between Mikhail Gorbachev and Ronald Reagan in Geneva. Since that meeting many encouraging steps have been taken in that direction in Soviet-American strategic relations, this year in particular.

For instance, today all concepts regarding the use of strategic nuclear weapons must be assessed from the standpoint of how well they fit in with the idea of preventing nuclear disaster, not of who will prevail in the "race to annihilation."

In that regard the first strike concept proposed by V. Repin would place us, on a psychological level, in the same frame of reference as American nuclear planners, and would apparently strengthen the nuclear deterrence system. But one must not forget that the negative aspects more than compensate for this psychological effect.

Firstly, in order for the first strike strategy not to be merely a bluff over the long run, each year everincreasing allocations would have to be made to fund research and development efforts. Military science would constantly be seeking new models of weapons capable of guaranteeing the success of a first strike.

Secondly, reliance on a first strike would require a permanent state of heightened combat readiness at missile bases, and in view of the increasing technical complexity of the system it is becoming more and more difficult to provide that without using computers to control those systems. Thus people would be forced to turn over their monitoring and control functions to machines and would become their prisoners. But, as you are aware, a breakdown in some part of this system is difficult to prevent, and even more difficult to correct in the midst of rapidly unfolding events.

Thirdly, preparedness for a first strike would, as A. Arbatov correctly notes, undermine the atmosphere of trust that now exists in Russian-American strategic relations and in joint efforts to prevent war.

Finally, a first strike is one attribute of the offensive doctrine that Russia has already abandoned, both as a legacy of Soviet defense doctrine and as the source of the concept of nuclear missile "non-targeting."

The concept of a retaliatory strike also has pluses and minuses from the standpoint of preventing nuclear war. Its advantage lies in the psychological effect that will ensue in the event that we state this policy. It would be another step in a chain of confidence-building measures on our part which has spurred on the United States: first there was removal of targeting instructions from a portion of our missiles, then the complete removal of missiles from combat alert status, and now rejection of a retaliatory counterstrike.

But a retaliatory strike is dangerous due to its chilling effect. A number of research and design projects could be terminated, but that is not always beneficial. Furthermore, according to mathematical calculations implementation of the idea of a retaliatory strike requires quantitative warhead superiority, so that enough will remain intact to launch a retaliatory strike against the enemy. And that undermines the fundamental principles of the balance of forces agreements that have been reached.

If someone asked me which of the two concepts now under discussion should be selected, I would reply: a concept of measures designed to prevent a nuclear attack of any type.

Such measures, in addition to those already being implemented or currently being negotiated with the United States, could also include:

—a mutual agreement to remove missiles targeted at the territory of both the United States and Russia from combat alert status:

- termination of flights by aircraft with nuclear warheads on board;
- —mutual blocking of [blokirovka] sea-based missile launches;
- —exchange of secrets regarding electronic locks and blocking systems against accidental missiles launches. This measure is important because it ensures that each side is fully confident of the reliability of the technical means for preventing a breakdown in the other side's system for control of its nuclear missiles complex;
- identification of warning systems, and their unification on a mutual basis;
- —conducting joint technical-combat exercises to prevent missile launches.

This list includes measures which have been touched upon to one degree or another in existing agreements. But a majority of them will require further development and discussion on a bilateral basis. If it is possible to reach agreement between Russia and the United States on these measures, then they could be extended to the other nuclear powers as well.

The most important thing we must understand today is that what matters most is not the concept and plans for use of nuclear weapons. The guarantee that nuclear war will be prevented involves both preventive measures to preclude unauthorized missile launches (resulting from a lack of time for decision making). In order to keep from being blown into the next world, we must do everything humanly possible in this world to prevent that fateful "D-Day."

There are ways of doing that right now, in the current atmosphere of mutual trust between Russia and the United States. But we must not let this rare opportunity slip by.

MILITARY CONFLICT, FOREIGN MILITARY AFFAIRS

Yeltsin Proposes Military Cooperation with Seoul 93UM0222A Moscow NEZAVISIMAYA GAZETA in Russian 20 Nov 92 p 1

[Articles by Vera Kuznetsov and Leonid Velekhov, Seoul: "The Initiation of Russia's Aggressive Policy in the Pacific Ocean: Boris Yeltsin Has Proposed Military Cooperation to Seoul"]

[Text]

Vera Kuznetsov

THE VISIT

It was raining in Seoul and therefore all of the ceremonies associated with the negotiations and the signing of the political agreement between the countries occurred

not in the small meadow in front of Blue House but in the Presidential Palace that is seriously guarded (they say that in 1976 North Koreans dressed in the uniforms of South Korean soldiers came into South Korea through an underground passage and marched 70 kilometers along its territory and, having reached the palace, carried out an exchange of gunfire). In general, the tense relations of the two Koreas (North and South) are no secret for anyone. People are afraid to live north of Seoul and there are only concrete antitank traps in case of attack instead of houses.

The president of the Republic of Korea himself, after the successes in normalizing relations with China and now with Russia hopes for a peaceful reunification of the two Koreas. But threats-and first of all North Korea's attempts to develop nuclear weapons—still remain. Of course, Boris Yeltsin knows about that. In an interview to Russian journalists, he even said that the "visit to South Korea should not somehow damage the North" but, in the president's words, relations with the North Koreans will be reviewed. This signifies deideologization and the cessation of deliveries of military equipment and nuclear equipment. Furthermore, Article No 1 of the Treaty between the DPRK [Democratic People's Republic of Koreal and the USSR dated 1961 on military assistance to North Korea in the event of war will be removed. Two hours later, while speaking to the Korean National Assembly, Yeltsin already unambiguously stated: "We are ceasing any free military assistance to North Korea".

However, many observers are pessimistic while thinking that it will still be harder for Yeltsin to knock down the northern wall than it was for Gorbachev to knock down the Berlin Wall. But there is another parallel in the Asian-Pacific Ocean Region [ATR] that will turn out to be a hard nut for Yeltsin to crack. That is the interrelations of Japan, Russia and Korea. Andrey Kozyrev expressed that point of view on the first day of the visit to Seoul: "The fact that we began with the Republic of Korea is a very proper choice, this places Russia's relations with Japan and with North Korea on the proper plane." The next visits at the highest level are planned to China and India. "And we are preparing to visit Japan." added the Russian Federation Minister of Foreign Affairs. "The day before yesterday Yeltsin sent a note to Premier Miyazawa which states that we are positively assessing an international conference in Tokyo (on assistance to the republics of the former USSR—NG) and we will cooperate even further but we need to find a compromise on the Kuriles". Yeltsin himself said that Roh Tae Woo met with Miyazawa on the eve of Yeltsin's arrival in Seoul and that Miyazawa proposed raising the issue of the Kuriles in Russo-Korean negotiations and to even make conditions to Russia. Roh Tae Woo bypassed this topic in silence. And nevertheless Yeltsin stressed: "We do not view the postponement of the visit to Japan as a complication of relations with that country".

Leonid Velekhov

While speaking yesterday to the Republic of Korea National Assembly, Russian President Boris Yeltsin stated that for the first time in the entire history of relations between two countries, Korea "is becoming one of a number of Russia's leading partners in the Asian-Pacific Ocean Region".

The Russian President declared his intention for the country to become a full-fledged participant in cooperation in the ATR and become involved in the activities of regional interstate organizations. Yeltsin stressed the special role that Russia can play in this cooperation: its "very fate" has been to become the bridge between Europe and the countries of the ATR.

The Russian President proposed without delay to begin to form a mechanism for multilateral agreements among the countries of the ATR and the creation of a crisis resolution institute and he advanced the idea of organizing a special Center for the Prevention of Conflict Situations in the Region for that purpose.

U.S. Efforts 'to Curtail Military Operation in Somalia' Noted

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[Article by Vladimir Abarinov under the rubric "Africa": "Is the UN Washing Its Hands?"]

[Text]

The Americans Have Not Agreed to Bear Political Responsibility for Stabilization in Somalia

It was revealed last week that Washington is making diplomatic efforts to curtail the military operation in Somalia. Secretary of State Eagleberger paid an unexpected visit to UN Secretary General Boutros-Ghali, during which he called upon the latter to plan for the earliest possible replacement of American forces in Somalia with UN forces. The appeal, one would assume, came as a complete surprise to Boutros-Ghali, who literally the day before had criticized the Americans for

their disinclination to disarm the warring factions. Admittedly, however, UN Security Council Resolution 794 does not contain a word about disarmament. It states only that "all necessary steps" should be taken to provide security for humanitarian deliveries. The Americans have attempted to effect a disarmament, to be sure, but were not particularly successful. The Somalis simply hid their weapons.

Many experts have warned that Operation Restore Hope could be dragged out indefinitely. In their opinion, the USA should in no case try to restore the power structures in Somalia alone. This task should be turned over to the UN at the very first opportunity. Otherwise, American troops could meet rigid resistance, and as soon as Somali blood was shed, the USA would lose the support of the Africans—particularly the Muslim countries. Washington's openly stated desire not to set a precedent is also an important factor. There are plenty of countries in the world in which events are developing like those in the Somali scenario. Losses of American have been minimal to this point and cannot play a decisive role, but it could happen, should the situation turn bad, that they would simply not be able to leave the country fast enough.

On Sunday Brent Scrowcroft, the President's national security adviser, affirmed Washington's intention to remove the troops from Somalia by 20 January. The decision was therefore made under pressure from the Clinton team. Lt Gen Robert Johnston, commender of American forces in Somalia, confirmed the the withdrawal could be expected to begin in January but denied the existence of a precisely defined schedule.

At the same time NEZAVISIMAYA GAZETA's theory that Washington has a new African course is being confirmed. President Bush plans within the next few days to sign a directive on a stepped-up U.S. policy in Africa. The document is designed specifically to forestall crises like that of Somalia in the early stages. The directive stems from the appearance of a new generation of leaders on the African political scene and the general democratization of the continent. "This situation," the directive states, "offers a rare window of opportunity, which could slam shut if we do not help the Africans demonstrate that economic development and political pluralism are not directly opposite concepts."

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